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THE SMALL LOANS PROBLEM: CONNECTICUT EXPERIENCE

The making of loans to necessitous borrowers has always involved nice questions of financial expediency and of justice. It is recalled that the Church in the Middle Ages placed its disapproval upon the payment of "usury," largely because loans were made for consumption purposes and thus the unfortunate borrowers found themselves placed in the position of debtors with no means of extricating themselves from a bad situation. With the metamorphosis in economic life that opened the way for loans for productive employment, the Church injunction against the collection of "usury" was relaxed. This modification, however, did not solve the problem of the small borrower who wished to secure funds to tide him over a temporary emergency. This gap in our loan system has been filled usually, as is well known, by the familiar loan shark.[1]

In the United States much concern has been expressed for the poor man who got himself in the grip of the loan shark, and who found himself sinking deeper and deeper into the mire of debt even though he may have paid the lender many times the amount of the original loan. This concern for the small borrower, however, did not find adequate expression in any provision to meet his needs until recent years. In 1910 the Russell Sage Foundation, through its Department of Remedial Loans, began the study of the small loan problem. Its aim was to provide machinery whereby the necessitous borrower could be taken care of without resort to the loan shark. The study thus begun resulted in the formulation of what has been called the Uniform Small Loans act, drafted in 1916 and now adopted with only slight modification in eighteen states.[2] Besides these eighteen, eight additional states have enacted small loan laws which are similar to the Uniform law, but which specify a different maximum rate of interest or include a fee as a part of the price to be paid the lender. Substantially, then, more

[1] F. W. Ryan, *Usury and Usury Laws*, gives a good discussion of the whole problem of consumption loans.

[2] Hilborn, "The Small Loan Act," *American Bar Association Journal*, Nov., 1928, p. 581.

than half the states have made an attempt by special legislation to regulate this type of loan.[3] Mr. Leon M. Henderson, director of remedial loans of the Russell Sage Foundation, has recently stated that twenty-four states have adopted the Uniform law prepared by the Sage Foundation.[4] He predicts that ten or eleven additional states will consider this year the adoption of this law or one similar to it.

In 1919, representatives of small loan companies outside the state of Connecticut inaugurated a movement to have the Connecticut legislature adopt the Uniform Small Loans act. Largely because of the thorough manner in which the campaign was directed and through the support of the Russell Sage Foundation, the state legislature was induced to enact the law.[5] This law has now been on the statute books for nearly ten years; and perhaps this period is of sufficient length to warrant a study of the law from the point of view of its objectives and the degree to which these have been attained. Some of the questions that suggest themselves are: Why was the law passed? Has it driven the loan shark out of business? Has it helped necessitous borrowers? Does it need modification, and, if so, in what direction? Does the experience in Connecticut afford a basis for answers to the above questions?

Many attempts have been made to repeal the Connecticut law and to amend it. Only two amendments, discussed below, have been enacted.[6] By the provisions of the 1919 law, a person or a corporation may apply to the Bank Commissioner for the privilege of engaging in the business of making small loans. The applicant must pay a fee of $100 and give a satisfactory bond of $1,000 for each office to be opened, the bond to be forfeited in the event of violation of the law. If the Bank Commissioner approves the bond, he issues a license for a period of one year. Licenses may be renewed annually upon the payment of the fee and filing of bonds. The Commissioner may require additional bonds if he thinks necessary. He may revoke the license upon violation of the law and for a second offense he must revoke the license. It does not appear that the Commissioner has any discretionary power as to withholding licenses so long as the provisions of the law are complied with.

The Bank Commissioner is given plenary power to prescribe the records to be kept by a loan company. All records must be kept at least two years and are open to inspection by the Commissioner or his agents. The heart of the legislation lies in section 13, which authorizes a collection of interest at the rate of $3\frac{1}{2}$ per cent per month for the period of the loan, or 42 per cent annually on loans the amount of which is

[3] *Ibid.*, p. 584.
[4] New York *Times*, Feb. 3, 1929, p. 18.
[5] *Public Acts of Conn.*, 1919, ch. 219.
[6] *Public Acts of Conn.*, 1923, ch. 223; *Public Acts*, 1927, ch. 283.

not to exceed $300.[7] The borrower from such a company must be given a statement, in the English language, indicating the amount of and the terms of the loan. Any assignment of wages to be valid must be given at the time the loan is contracted. With such an assignment, the licensee can collect not to exceed 10 per cent of the monthly wage of the borrower from the period of assignment. No fees or other charges in addition to the monthly interest payment can be made, and violation of the law is punishable by fine or imprisonment or both. Loans are made without indorsement of others than husband and wife. Usually they are secured by chattel mortgages on household furniture or by wage liens.

The law as enacted in 1919 has not been changed in substance since that time. The amendment of 1923 makes the Bank Commission, consisting of the Bank Commissioner, the State Treasurer, and the State Comptroller, the licensing authority. Thus a board is substituted for an individual. This amendment also provides that upon compliance with the terms of the law the Commission may issue a license. This would indicate that the legislature intended to substitute the discretion of the Commission for what had been a routine act of the Bank Commissioner under the original law. Upon investigation it does not appear that this discretion has been used by the Commission; and licenses are still issued automatically in Connecticut, provided the applicants have complied with the provisions of the law. However, the mere existence of this discretionary power has probably served to make the applicants more careful to comply with the suggestions of the Bank Commissioner than they would be otherwise.

The only other change in the law was made in 1927. This change made legally binding what had been the professed general practice theretofore, namely, giving the borrower an option to repay his loan at any time before maturity upon the payment of the interest for the actual number of days for which he had had the loan. The privilege of repayment had been insisted upon by the Bank Commissioner before the passage of the amendment. He said that he would revoke the license of any company which refused to accept prepayment of the loan if this were called to his attention. But, as pointed out by a representative of the American Federation of Labor, the borrowers did not always know of this privilege and therefore could not take advantage of it.[8] This provision was a part of the bill which reduced interest rates to 3 per cent monthly, as passed by the legislature in 1925, and vetoed by the governor.

[7] Mathematically, a loan at 3½ per cent monthly, if the interest is paid monthly, amounts to an annual interest charge of 51 per cent rather than of the 42 per cent mentioned in the law.

[8] Conn. General Assembly, *Hearings, Banks*, 1927, p. 77.

The nearest approach to a radical change in the law came in 1925 when the state legislature passed a bill to the effect that the maximum interest rate under the law should be 3 per cent monthly.[9] This bill failed of enactment through the exercise of the pocket veto by Governor Trumbull. The provision for optional payment, it is recalled, was made in 1927 and was approved by the governor.

In reply to an inquiry addressed to Governor Trumbull as to the reasons for the disapproval of the change to a 3 per cent monthly interest rate, the executive secretary to the governor, Mr. E. L. Kelly, has written:

> Because of the reduction on the interest rate, Governor Trumbull did not see fit to lend executive approval. This was in accord with the opinion of the Banking Commission and the best thought on the subject.[10]

The attention of the writer was first drawn to this type of loan something more than a year ago when he received a circular letter from a local company offering to lend him, without security, a sum of money not to exceed $300. The letterhead indicated that the company was "licensed by the state and bonded to the public." When, upon inquiry, it was learned that the interest rate permitted was 42 per cent a year, there was an immediate challenge to learn something about the operation of such companies and the reasons for their existence. The first reaction was naturally that of an outraged sense of justice at having placed on this rate of interest for necessitous borrowers the sanction of law. Hence an investigation to determine, if possible, whether such legislative sanction is warranted by the facts of the case.

It is interesting to observe that at the present time an attempt is being made by several states to repeal the Uniform Small Loans act. Bills have recently been introduced in the legislature of Indiana, Missouri, and Ohio to make the maximum interest rate for small loans 18 per cent.[11] Mr. Henderson, of the Sage Foundation, believes that as the Uniform law is enacted by a larger number of states, the loan sharks, realizing that the territory within which they can operate is being narrowed, are concentrating their efforts and "pooling their resources" to fight the Uniform act.[12]

History of the Law

The small loan proposal, when first suggested to the Banking Committee of the Connecticut legislature, met practically unanimous opposition. Mr. John N. Brooks, chairman of the Banking Committee, has indicated the reversal of opinion of the members of the committee:

> When it [the bill] was started, every member of the committee was op-

[9] Substitute for Senate Bill 612.
[10] Letter to the writer, Dec. 20, 1928.
[11] New York *Times*, Feb. 8, 1929, p. 18.
[12] *Ibid.*

posed to it, and as time went along, through the recommendation of the Russell Sage Foundation and the fact that this was in effect in other states, one by one the committee was sold to the idea. It was as cleverly presented as any bill, and there were thirteen men who changed their minds.[13]

Incidentally, Mr. Brooks changed his mind again, and was one of the most vigorous advocates of repeal of the law in 1925. Mr. Hilborn, of the Russell Sage Foundation, appeared before the committee and said:

It is our experience there is need for the small loan. There comes a time when a man has sickness, etc., when he does require a small loan, and if he is in a place like Connecticut he has no place to go except charity. This act has been drawn to meet that need.[14]

Representatives of welfare organizations appeared before the committee and advocated the enactment of the bill. Some of these said frankly that they had been opposed to the measure when it first came to their attention. But, when the evils of the loan shark were contrasted with the probable effects of the proposed measure, the enactment of the bill seemed to them the lesser of two evils. Mr. Hilborn, who appeared as a representative of the Russell Sage Foundation in support of the bill, has suggested elsewhere[15] that there are only three possible methods of treating the small loan problem, namely:

Prohibit all loans made at rates of interest above the statutory maximum,
Permit loans above statutory rate but limit the profits of lenders,
Permit interest rates that will insure a profit to capital invested in small loan companies.

Testimony presented at the hearing was to the effect that the limit of $300 on loans was made so as not to interfere with the work of the commercial banks. The Morris Plan banks, it was claimed, did not meet the need for a temporary loan to a person whose promise to pay was not endorsed by others. The justification for the higher rate of interest was said to lie in the hazards of these loans and in the heavy overhead expense involved in making loans for short periods. Mr. E. P. East, representing one of the larger chain companies operating in other states—incidentally, he was the moving spirit and manager back of the agitation to have the law enacted—testified that from 3 per cent to 10 per cent of such loans proved to be no good. He insisted, also, that this law, if enacted, would drive the loan shark out of business.[16]

Scope of Business in Connecticut

The reports of the Bank Commissioner prior to 1924 did not give any information as to the extent to which this new type of loan has

[13] Conn. General Assembly, *Hearings, Banks*, 1925, p. 110.
[14] Conn. General Assembly, *Hearings, Banks*, 1919, p. 58.
[15] *American Bar Association Journal*, Nov., 1928.
[16] Conn. General Assembly, *Hearings, Banks*, 1919, p. 122; p. 163.

grown in Connecticut. Some idea of the growth in the early years can be got from scattered sources. In 1921 a representative of the Bank Commissioner testified that at that time eight companies, all chain companies, were doing business under the law, two each in Hartford, New Haven, Bridgeport, and Waterbury.[17] He asserted that the companies had kept within the law and the average loan made was for an amount between $70 and $75.

Information presented in 1923, when the Banking Committee of the legislature was considering a modification of the law, shows that thirty-five lenders in the state, twenty of whom had been licensed within the year, made 61,484 loans aggregating $1,000,000.[18]

The report of the Bank Commissioner for 1924 for the first time shows the growth of small loan companies.[19] At that time, fifty-seven licensed companies, with aggregate capital of $1,471,404.61 made loans of $2,240,809.40. The 1927 annual report of the commissioner gives the number of licensed companies as ninety-nine, with aggregate capital of $2,700,717 and aggregate loans of $4,643,511.78.[20] In 1928 the number had increased to one hundred and twenty-eight, the capital to $3,527,056.50, and aggregate loans to $5,942,229.69.

Massachusetts, which has a 3 per cent per month law, for the license year ending September 30, 1928, had one hundred thirty-three licensed agencies with working capital of $17,414,140.66. These companies during the year made 205,386 loans amounting to $19,716,605.94.[21] Massachusetts, therefore, with a law permitting a lower interest rate, had a slightly larger number of licensed companies than Connecticut, and these companies loaned more than three times as much as did the Connecticut companies.

It is apparent from these figures that the small loan companies in Connecticut are doing a substantial business, and that the volume of business has grown rapidly. Either such companies have met a real need or else they have created a situation that makes for profitable business to private capital. It is important, therefore, to answer the question whether this development should be fostered or whether it should be discouraged as undesirable and anti-social.

The location of the companies in different sections of the state may have some significance. It has been shown that in 1921 all the companies, eight in number, were located two each in New Haven, Hartford, Bridgeport, and Waterbury. The report of the Commissioner for 1928

[17] *Ibid.*, 1921, p. 87.
[18] *Ibid.*, 1923, pp. 184, 186.
[19] *Ibid.*, p. 757-787.
[20] Table 7.
[21] Boston *Herald*, Feb. 6, 1929, article by E. E. Davidson, Supervisor of Loan Agencies in Massachusetts.

shows that of the one hundred and twenty-eight companies, forty-three are in New Haven, and only nine in Hartford. If New Haven needs forty-three of these companies to meet the needs of necessitous borrowers, it is difficult to conclude that Hartford, even with a different type of population, can have its needs adequately met by only nine companies. Also it is difficult to see why New Britain, with a population of approximately 80,000 people, largely industrial, needs only four companies. If the reason for authorizing these companies has been a desire to attract private capital to finance the temporary needs of small borrowers, it seems that the appeal of a high interest rate has fallen short in providing the needed facilities in some cities, or else that there is needless duplication in others. Does this unevenness in the degree of saturation indicate the success of the appeal to private capital?

Purposes for Which Loans Are Made

The variety of purposes for which loans are made is almost as great as that for loans granted by commercial banks. They are made for expenses occasioned by sickness and death, for family needs such as the purchase of fuel and clothing, for the purchase of automobiles—a questionable purpose, perhaps, in view of the nature of these loans—for the payment of loans and taxes, for travel and vacations, and for the renovation of homes.

One instance has come to the writer's attention of a business man who on Saturday borrowed the money to meet his payroll. This man had funds due him on Monday and he did not wish to negotiate a loan at a bank for so brief a period, preferring rather to pay the high rate of interest at a loan company. Even though a rate of 3½ per cent per month seems high, the total charge for a two-day loan is not a serious burden. However, loans of the type of this one are relatively so unimportant as to play no large part in the appraisal of the law.

Effect of the Law on Loan Sharks

The loan shark is by the very nature of his business an elusive individual. It is difficult to get data to show how the small loan act has affected his business. At the time of the enactment of the Connecticut law, it was predicted freely that the law, if passed, would mean the elimination of this type of lender. The testimony of Mr. Hilborn, in 1919, was to the effect that the enactment of the small loan law had driven the loan shark out of business in New York state.[22] Mr. East, at the same time, told the committee that publicity made it impossible for loan sharks to operate. Mr. Henderson, of the Russell Sage Foundation, says that New York state, which has had a 2½

[22] Conn. General Assembly, *Hearings, Banks,* 1919, p. 163.

per cent monthly interest law since 1915, had less money in the small loan business in 1928 than in 1915. The attorney-general of New York estimated that loan sharks in the state were charging interest aggregating $25,000,000 yearly.[23]

In personal interviews the writer has been told that loan sharks do less business in Connecticut than they did before the enactment of the small loan act. This has been the view of those closest to the operation of the law. A like opinion has been expressed for Maryland by the Bank Commissioner of that state.[24] Mr. Henderson, the successor of Mr. Hilborn of the Russell Sage Foundation, testified that the 3 per cent monthly interest permitted in Missouri had driven the small loan companies out of business. Likewise, he said, the 2 per cent monthly interest allowed in New York state was driving the small loan companies out and loan sharks were doing a big business.[25] It seems reasonable to conclude that loan sharks find Connecticut a less fertile field for their operations than they did before the enactment of the present law. Whether too high a price has been exacted for their elimination is another question.

The High Interest Rate

The most controversial aspect of the small loan act has to do with the 3½ per cent monthly interest allowed on unpaid balances. In contrast with commercial banks, it is suggested, these companies usually loan only their own capital, and cannot make money through the lending of funds deposited with them. However, the report of the Bank Commissioner for 1927 shows that the companies were borrowing $1,083,276.54. For 1928 they used borrowed funds to the amount of $1,273,722.96. The loan companies contend that the large overhead expense and the heavy losses in this kind of loan make it necessary to charge 3½ per cent monthly to insure earnings adequate to induce private capital to enter the business. It has been pointed out frequently that commercial banks would not care for this type of business because of the heavy cost of lending small sums without security. It would be easier to reach a conclusion as to the justification for this rate of interest if the Bank Commissioner published the average rate of return on invested capital in loan companies in the state. To date this information has not been given to the public. Lacking such official information, resort must be had to testimony and to reports from other states, some of which do give this information officially.

In all the hearings on this legislation and the proposals to change it, the Russell Sage Foundation and the representatives of the loan com-

[23] New York *Times*, Feb. 3, 1929, p. 18.
[24] Conn. General Assembly, *Hearings, Banks*, 1923, p. 183.
[25] *Ibid.*, 1927, p. 78.

panies have insisted that the high interest rate is necessary. In 1925, however, testimony was submitted to show that in New Jersey, Pennsylvania, and Illinois, the average net losses for small loan companies in each case was less than 1 per cent.[26] Bank Commissioner Byrne in 1927 testified that the losses reported in Connecticut varied from 4 per cent to 5 per cent,[27] and that he would estimate the net earnings of the companies as approximately 7 per cent. The Equitable, a chain company, in 1923 reported a net gain of 12 per cent on its investment.[28] Commissioner Byrne said that the Beneficial, another chain, reported net profits of 23 per cent on investments.[29] Although he apparently did not intend to make a humorous remark, the Commissioner reported that one of the larger chain companies, the New England Equitable, promised, if experience showed 3½ per cent to be too high to insure a fair return, to report this conclusion and to suggest a decrease in the maximum interest rate.[30] To date there is no evidence that the company in question has urged a decrease.

Frequent reference has been made to the experience of other states. The loan companies point to the bad situation in other states in which the rate is below 3½ per cent monthly. The testimony and evidence here are somewhat confusing. The Supervisor of Loan Agencies for Massachusetts, a state similar to Connecticut industrially, for example, in his 1927 report, says:

> The fact that there was an increase in the number of licensed agencies during the past license year, indicates that the small loan business in Massachusetts is in a sound condition, and that because of the established nature of the business, money can be made at the lawful rates permitted here, which are less than the rates charged under the Uniform Small Loan Law in many other states.[31]

Massachusetts permits a monthly interest charge of 3 per cent.

It is quite evident that the earnings of the chain companies in Connecticut are much larger than those of the small independent local companies. One argument advanced against reduction of the interest rate is that the business would all go to the chain companies financed by outside capital. But if the purpose of this legislation is to benefit the small borrower, there does not seem to be any more reason for penalizing him to support the marginal loan company locally financed than there is for prescribing that he must purchase his groceries from independent stores rather than take advantage of the lower prices at which the chain grocery can meet his needs. To this extent, at

[26] Conn. General Assembly, *Hearings, Banks,* 1925, p. 116.
[27] *Ibid.,* 1927, p. 77.
[28] *Ibid.,* 1923, p. 180.
[29] *Ibid.,* p. 182.
[30] Conn. General Assembly, *Hearings, Banks,* 1923, p. 184.
[31] Mass. *Public Documents,* No. 95, p. 2.

least, it would seem that the welfare of the supposed beneficiary of the legislation were being sacrificed to enable local capital to operate a profitable business at his expense. This is the "home market" idea with a vengeance.

With such inadequate information as to the earnings, it becomes difficult to determine whether $3\frac{1}{2}$ per cent is too high a rate. Mr. Brooks, chairman of the Bank Committee which reported favorably the law of 1919, expressed his complete change of position in 1925. As to earnings of companies organized under the law he said: ". . . . We were absolutely refused such information on that score. They said it was none of our business. . . . ."[32] On one point, it seems to the present writer, there should be no dispute: small loan companies are in a peculiar sense "vested with a public interest." Licenses are granted to these companies to charge interest rates higher than those usually allowed. The professed object is assistance to the necessitous borrower. Hence, to enact legislation intelligently, it seems necessary that the most complete information be published as to the profits from this kind of lending. There need be no divulgence of confidential information, if the Bank Commissioner should classify the companies as to type and publish information as to the gross profits of each class of company organization. The publication of such summary data would constitute no greater display of confidential information as to particular companies than is given by the Commissioner in the publication of the amount of capital invested, the volume of loans granted, and other data given in his annual report. On any basis other than such publicity, the community is asked to give a privilege with no rendering of an account to the donor for the faithful and economical performance of duty. It requires a violent stretch of the imagination to think of these companies as "welfare organizations," so long as the public which authorizes them for a public purpose is kept completely in the dark as to their earnings. Further, the public does not have the information requisite to the adequate protection of the small borrower, a duty which by implication is assumed in licensing the companies.

From another point of view, it would seem as if giving the heavy losses as a reason for high interest rates were putting the cart before the horse. With the large margin of profits made available by the present interest rate, there is a temptation to take risks which, under a more conservative profit plan, would not be incurred by loan companies. This means, then, that the charge made against the honest borrower must be loaded to pay the losses sustained by the failure of the shiftless to repay their loans—a failure which would not exist in such large measure if the companies were forced to select their clients

[32] Conn. General Assembly, *Hearings, Banks*, 1925, p. 111.

more carefully. Perhaps there is, from this point of view, some basis for the statement of Mr. Wells, of the Connecticut Manufacturers' Association, to the Banking Committee in 1925: ". . . . There is no reason why one series of poor men should pay another poor man's bill simply because he has to borrow in time of stress."[33]

Another obvious explanation for the necessity of the high interest rate lies in the duplication of loan offices in any one city. The town of Middletown, for example, with a population of approximately 20,000 people, has four of these licensed companies. In 1927 the loans of these companies were $21,528.84; $12,454.16; $4,912; and $58,578.20 respectively.[34] In 1928 their loans were, respectively, $45,474.77; $24,259.09; $6,017.00; $74,335.74. In view of the fact that this community has also a Morris Plan bank, it looks as though the saturation point had more than been passed. If business units are to be operated on such a small scale, it is naturally necessary to load the interest with a premium sufficient to take care of the overhead in each case. When the writer suggested to an executive of one of the leading chain companies that this number seemed to be excessive for a town the size of Middletown, he agreed quite readily and said that in such a situation there was inevitably a great deal of "doubling up," that is, having several companies lend to the same individual. This means a greater ratio of losses and hence a higher gross interest charge. Incidentally, also, it defeats in part the purpose of the law in placing a limitation of $300 on the loans to be made.

This executive dissented vigorously, however, to the suggestion of the writer that the number of loan companies be limited with reference to the population. His position was that the population structure was so different in various places as to make undesirable any hard and fast limitation on that basis. But the placing of a maximum number, it seems, would in no case force companies to open up offices in suburban towns, the residents of which were not of the type to patronize the small loan companies. Such a maximum might help in those cases in which there is an excessive number of companies. If the intent of the law is to protect the worthy borrower, it is difficult to see wherein it becomes necessary to grant a license to every group which wishes to invade the small loan field in the hope of picking up a few dollars. Especially does objection become pertinent when it is recalled that the duplication makes necessary a higher interest charge.

A state official, in conversation with the writer, objected to the proposal to limit the number of offices, on the ground that such a limitation would discriminate against locally financed companies in favor of

[33] Conn. General Assembly, *Hearings, Banks,* 1925, p. 108.

[34] *Annual Report of Bank Commissioner,* 1927, Table 7.

branches of chain systems financed by outside capital. Is not the present arrangement one which exacts too high a price of the necessitous borrower to support the "home market" argument in favor of domestic companies? Bank Commissioner Byrne, in 1927, opposed the putting of a limit on the number of companies.[35] He said that many of these companies were based on racial groups. The latter companies, however, are mainly mutual companies organized for non-profit motives. This difficulty could be obviated by exempting from the maximum limit those companies of a mutual type. No one of the objections to limiting the numbers appears to be strong enough to compensate for the higher interest charges forced by this duplication of companies. Of course, it would be necessary to administer the law with care so as not to show favoritism to certain companies. The difficulty of administration, however, is no excuse for failure to do a necessary thing.

Some light may be thrown on the reasonableness of the interest charge by the experience of commercial banks in the making of small loans. The American Bank and Trust Company of Bridgeport makes loans of this type secured by endorsement. Interest of 6 per cent is deducted in advance and the borrower agrees to repay the loan in twenty-five weekly installments. At first this bank made an additional service charge of approximately 1 per cent and a small insurance charge. Both these charges have since been discontinued because of a "feeling that they were unjust and that the 6 per cent interest for the length of time the note was to run was ample remuneration."[36] While this amounts to an interest charge between 12 per cent and 13 per cent, this is far short of the 42 per cent authorized by law. The overhead connected with the keeping of accounts would seem to be as heavy for the bank as it is for the small loan companies. It does not appear that the wide discrepancy in interest rates between the two types of loan can be explained solely by the smaller losses of the bank, the loans of which are endorsed by others than the borrower. President Tremaine of the Bridgeport bank, in a letter to the writer says:

> This plan is popular with working people and our loans are constantly increasing. It is a great accommodation to many people of our community and is not considered as competing with the small loan companies. We feel that 42 per cent a year is excessive.

A somewhat similar plan has been adopted by the National City Bank of New York. In this case loans are made up to $1,000. A discount of 6 per cent is collected in advance. Repayment of the loan is made in weekly installments. A novel feature is the payment of

[35] Conn. General Assembly, *Hearings, Banks*, 1927, p. 17.
[36] Letter of President Tremaine to the writer on Dec. 18, 1928.

compound interest at 3 per cent to the borrower on his weekly deposits.[37] The payment of interest on deposits is considered significant in that it tends to inculcate in the borrower the habits of thrift. In a letter to the writer the manager of the department says of the borrower: "We have no desire to see him remain a borrower." It hardly seems that the security of endorsement by others is adequate to explain all the difference between the charge made by the National City Bank and that collected by small loan companies in Connecticut. The only effect here, as in the Bridgeport case, would lie in a decrease in the number of bad loans, not in a decrease of overhead, which is said to be one of the factors making the high rate necessary.

During the past year a new departure in the small loan business was inaugurated in Connecticut. The Franklin Plan, a chain company with offices in New Haven, Ansonia, Hartford, and Bridgeport, began operations under the Small Loans act. This company offers terms less onerous than those companies which make the 3½ per cent monthly interest charge. Loans are secured by endorsement of husband and wife, by chattel mortgages, and by wage liens up to ten per cent of the monthly wage. For the first month of the loan an interest rate of 1.9 per cent is paid. On subsequent payments the monthly rate is 1.8 per cent. If, for reasons other than illness or unemployment, the borrower is unable, for a period of more than three days after they are due, to meet his monthly payments, an additional charge of 1 per cent per month is made for the time such payments are due and unpaid. If payments remain in default for more than thirty days the entire principal sum becomes due.[38] This company in its advertisement gives information as to the rate of interest charged, information which, so far as the writer has learned, is not published and advertised by any other small loan company. The computations advertised by the Franklin Plan show that the borrower saves on a $100 loan $17.80, on a $200 loan $35.50, on a $300 loan $53.30, a saving in each case of approximately one-half the interest cost.[39]

If experience demonstrates that the Franklin Plan can make money, this will raise a serious question as to the necessity of permitting a 3½ per cent monthly interest rate as an inducement to private capital to enter the field.

The Household Finance Corporation, with offices in 68 cities and different states, has recently cut its monthly interest rate to 2½ per cent. This company has $13,000,000 loans outstanding and has recently sold through Lee, Higginson Company of Boston, $7,000,000

[37] Circular issued by Personal Loan Department of National City Bank.

[38] Contract blank issued by Franklin Plan Company of America and supplied by New Haven office.

[39] Advertisement in Bridgeport *Times-Union* for Jan. 23, 1929.

new stock.[40] Apparently the investment bankers think that consumers' loans can be made at a lower rate of interest than the law of Connecticut permits.

Bad Effects of the Connecticut Small Loan Act

In the New York *Times* for January 13, 1929, Mr. William Hirsch of Philadelphia, shows that the losses from small loan companies have been very small, usually not exceeding one-half of one per cent of the loan. As to small loan companies in general, he concludes:

> The small loans act, operating in a number of states and devised after extended study by the Russell Sage Foundation in coöperation with the then usurer and the now licensed lender, is wrong basically. It is the one form of loan which must perforce bring about misery to the individual who is already oppressed. It may not be considered a remedial law or an act to regulate the loan business as long as it exacts from the best risks eight times the interest charge the law permits to be charged for the less-sure risk and the individual who requires money merely for gain and not for bread and butter.[41]

The law came in for a great deal of bitter attack in 1925 when the legislature passed a bill to reduce the interest rate to 3 per cent monthly.[42] Mr. R. A. Wells, representing the Manufacturers' Association of Connecticut, said:

> As the manufacturers have come into contact with the practical operation of this thing, they feel it to be a gross injustice and gross hardship to the employees with limited means.[43]

President Whittlesey of the Hartford Rubber Works, said his experience showed that the law

> . . . . really pauperized; it puts the people down and out, and they have no way of getting out unless it happens to be brought to somebody's attention that can give them some means of escape.[44]

Mr. Whittlesey said he had offered his check to pay off the loan of one borrower and that he had difficulty in getting the company to accept payment and to release the mortgage and assignment of wages held. He had been told that there was no chance to have the law repealed because his friends were drawing too large dividends from small loan companies.[45]

One of the claims most urgently advanced by the proponents of the small loan act is that it encourages thrift by forcing a man to budget his income so as to repay the loan. In a recent interview with an ex-

[40] Letter to writer from Mr. H. S. Osborne, of Bridgeport, on Jan. 24, 1929.
[41] Section 3, p. 5.
[42] Conn. General Assembly, *Hearings, Banks,* 1925.
[43] Conn. General Assembly, *Hearings, Banks,* 1925, p. 108.
[44] *Ibid.,* p. 110.
[45] *Ibid.,* p. 115.

ecutive of one of the chain companies this claim was presented to the writer. Within the next five minutes this executive said it was the policy of his company to lend only a small amount at first. Gradually, as the borrower proved his reliability by the repayment of his loans, the company was willing to let him have a larger sum of money, even the $300 maximum permitted by law. This executive did not realize that there was a direct conflict between the promotion of thrift and the inducement of a wage earner to become a permanent client borrowing at the rate of 42 per cent interest a year.

The records published by the State Bank Commissioner do not show the degree to which the clients of loan companies are permanent borrowers. From an investigation of this type of business in Connecticut, the writer has reached the tentative conclusion that probably 60 per cent of the customers of the loan companies become continuous borrowers. Certainly, it is on the side of safety to suggest that more than half the customers fall within this category.[46] If this estimate be only approximately correct, this constitutes a severe indictment of an organization dedicated to the promotion of thrift and the elevation of the economic status of the poor man. It suggests that the profit motive has been developed to the injury of any welfare impulse that may have been present at the time of the enactment of the law.

Another indictment against the loan companies lies in the type of advertising used. To quote only one instance, a circular letter of December 7, 1928, addressed to the writer by the Personal Finance Company of Middletown, a member of one of the larger chains, opens with the following paragraph:

> This is the month of Christmas checks—the fruit of thrift. We hope you are numbered among those who will share in the distribution of the large amount of money mailed out by the local banks. However, should you need additional money, our check for $100—or more—is waiting for you right now.

The mention of thrift in connection with this type of appeal serves but to make a mockery of the term. To characterize such advertising as vicious is using mild language. This may be a legitimate appeal when made by a profit-making business, but it comes with poor grace from a company which has secured a special franchise to collect a high rate of interest on the ground that it is a "welfare" organization. The writer has received many letters from small loan companies in which

[46] This estimate is based upon personal interviews with people who are in a position to know the business in Connecticut. Unfortunately, the writer is not at liberty to cite the names which were given in confidence. This indicates how necessary it is that the Bank Commissioner be instructed to publish such information in official form and thus substitute factual data for any estimates that may be made.

the ease of securing a loan was pictured in such language as to tend to break down any sales resistance that the working man might possess. Another practice of doubtful propriety has been the distribution of handbills so worded as to encourage people to borrow money from the loan companies for purchases which are not essential.

Conclusions

The above analysis points to the following conclusions:

More complete information is needed to show the justification for the high rate of interest now legalized. The Bank Commissioner should be instructed to publish information as to earnings and then leave to the discretion of the legislature any modification of the interest rate.

Some method of limiting the number of companies, as a means of reducing overhead cost and thus the cost of borrowers, should be worked out. Probably the simplest adequate method of limitation would be that of licensing not more than one company for a certain population. The exact number is one which might be agreed upon by the legislature in consultation with those who have administered the law. Mutual companies might well be excluded from the number constituting the maximum allowed by law. If this method of limitation is not acceptable, an improvement upon the present system would be the enactment of a law which left the number of companies to be authorized in any city to the discretion of the State Banking Commission. This Commission might be instructed to grant licenses when, in their opinion, a company was needed to meet the need for small loans. The delegation of this authority, however dangerous it may be, would be an improvement upon the present plan.

The writer feels that advertising matter, before publication, should be presented for the approval of the Bank Commissioner's office. To the contention that this would be a severe restriction of private property rights, it can be answered that the case presented is one which falls within the province of the state's police power and that it is essential to adopt whatever means may be needed to prevent the prostitution of the work of a supposedly welfare organization, chartered by the state for the public good, to a vicious purpose. Even though this might mean no change in the quality of advertising for a large number of the more conservative companies which present a rational appeal, the possibility of injury to the poor borrower by the more avaricious companies, makes it necessary to control such advertising.

The small loan act has probably saved the community from the greater evil of the loan shark. But there is yet room for refinement and improvement in the law. A study of the operation of the law in Connecticut, based as it is on incomplete data because of the absence

of full publicity, leaves one in doubt as to the wisdom of the continuance of the law on the statute books. The conditions seem to warrant a conclusion that this law is better than the passive policy of making no provision for small loan companies, but that the terms of the law might be modified, in the light of ten years' experience, to the benefit of the small borrower.

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THE RETURN TO THE GOLD STANDARD IN SWITZERLAND

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Not only in the period before the creation of the National Bank but even after it had begun operations and up to the outbreak of the World War, our country was constantly at the mercy of an efflux in varying degrees of its silver specie. The exchange rate in relation to France was frequently below parity, with the result that the five-franc pieces migrated to that country, whence they had to be brought back to Switzerland, often at considerable expense. During and after the war we witnessed a complete reversal of the silver movement: Latin Monetary Union[1] coins, instead of migrating from Switzerland to other states which were members of the Union, flowed steadily from those countries into Switzerland. At first there was an influx of fractional coins, then of five-franc pieces and finally, though to a lesser extent, of gold coins; so that ultimately one category after another of the Monetary Union coins had to be withdrawn from circulation in Switzerland. The *de facto* dissolution of the Latin Monetary Union was followed finally by its legal dissolution when Belgium, then Italy (and most recently France) abandoned the old franc parity and passed new monetary laws.

Thus practice as well as theory pointed in the same direction, *i.e.*, to the nationalization of our monetary system. The Latin Monetary Union, founded as it was on a bimetallic basis, could not subsist. Nor can it today be revived as a Latin gold monetary union, similar to that of Scandinavia, because of the existence in the former member states of various and divergent monetary laws. The withdrawal from circulation of foreign fractional coins and five-franc pieces was generally favored in Switzerland; and a certain section of the public even asked that it be put into effect at an earlier date.

In contrast with the prevailing opinion in regard to nationalization of silver coins, a certain amount of adverse criticism has been directed against demonetization of Union gold coins during the past year. This action has been widely misunderstood. It was interpreted to signify that the central bank wished to acquire the gold hoarded by private individuals in order to use it as gold cover for its note issue. Such,

[1] Founded by treaty in 1865 with the participation of France, Italy, Belgium, and Switzerland, Greece joining ten years later. Each country was authorized to mint silver coins of 5 francs, and gold coins of 5, 10, 50 and 100 francs, of uniform weight and content in all countries, which were to enjoy free circulation in all signatory countries. The arrangement underwent various modifications and was, naturally, disrupted by the war, although it was not until 1926 that it ceased definitively to operate. *(Translator's note.)*

however, was not the case. No one was compelled to give up these gold coins, which merely ceased to be legal tender in Switzerland if not delivered to the Bank, and from a legal point of view were thereafter considered to have the same status as English or American gold coins. A large part of these Union coins, but by no means all, were exchanged against Swiss gold coins or notes, or deposited against credit in current account. The National Bank, although it was under no compulsion to convert into gold, exchanged practically one-third of these offerings (approximately 32 million francs) for Swiss gold coins. A demonetization policy was rendered necessary because of the loss in connection with Union gold coins which were no longer of full standard weight. Losses of this nature have represented for the Federation about 670,000 francs in the past year alone, and for the National Bank about 438,000 francs (to which must be added a further loss for the Bank of some 6,000 francs every quarter). Another reason for the necessity of demonetization, as a foreign exchange measure to insure the stability of the Swiss franc, was the fact that an appreciation, however slight, in the value of the Swiss franc opened the floodgates to the stream of Monetary Union gold. Transactions of this nature were most advantageous to speculators when the gold coins in question fell within the lower limit of tolerance, with the result that a profit of 20 centimes (one per cent) or more was possible, at the expense of the Federation and the Bank, on every twenty-franc piece.

In the autumn of 1924—after the Austrian currency had achieved stability through the assistance of the League of Nations, and the German mark through the operation of the Dawes Plan, while Sweden and Holland had for some time maintained stability in relation to the dollar, and England was making progress in this direction—Switzerland attained parity of exchange and has maintained it consistently ever since. Influenced by the example of other central banks, Switzerland then began to pursue a more aggressive monetary policy. The turnover and reserves of gold devisen in the form of bills of exchange and sight balances revealed thereafter, as the annual reports of the central bank show, a very significant increase. The effect of this policy is further evidenced by the fact that the dollar, the parity of which is 5.18262, has been quoted in Switzerland since 1923 at the following average rates:

1923	5.53	1925	5.17	1927	5.19
1924	5.49	1926	5.175	1928[1]	5.19

In recognition of these circumstances the National Bank, as early as April, 1925, was invited by the Bank of England and the Netherlands Bank to issue simultaneously with them a proclamation of its return to

[1] Up to June 15.

the policy of a full gold standard. The Bank complied with this request on June 17, 1925, and made public the following announcement:

The Board of Directors of the Swiss National Bank, in consideration of the measures adopted by England and Holland for the establishment of the gold standard takes cognizance of the fact that the Management of the Bank, in agreement with the Executive Committee, have decided that the National Bank shall continue its policy of the last few months in maintaining the Swiss franc within the gold points in relation to the dollar, and that the export of gold shall be facilitated to the extent that gold bullion may be freely exported if the exporter is in a position to prove the import of a corresponding amount of gold.

Thereafter the central bank gave even more careful attention than before to the execution of its foreign exchange policy. Fluctuations in the rate of the Swiss franc were virtually eliminated and gold movements were free of all restriction. Stimulated by a study published by the central bank in 1925, entitled *The Monetary System of Switzerland*, and also by the bank's study in 1926 of Swiss legal tender circulation, preliminary steps were taken toward adjusting monetary and central bank legislation to the changed conditions, and certain reports were submitted by the bank's officials to the federal authorities. Pursuant to a suggestion emanating from the Department of Finance, the National Bank, in accordance with the decision of its Board of Directors on June 20, 1928, issued to the public the following statement of its monetary policy:

The management of the Swiss National Bank submitted to the Board of Directors at its meetings of March 5 and December 23, 1927, its report on the future of the Swiss monetary system. It also tendered to the federal authorities last year certain definite suggestions, grown out of the dissolution of the Latin Monetary Union, concerning a revision of the existing monetary and central bank legislation. These formal suggestions have to do with the introduction of the gold standard, conversion of five-franc pieces into fractional coins, and termination of the period of inconvertibility of banknotes. At the same time they outline a statutory basis for the convertibility of notes at the option of the Bank into gold coins, gold bars or gold exchange. At today's meeting the Board was presented with a further report by the Management, in agreement with the Executive Committee, on the present status of this question. On the strength of this report, the Board declared its approval of the central bank's action in continuing—until effective amendment of the monetary and central bank laws—its policy of the last few years for the maintenance of the Swiss franc within the so-called gold points in its relation to the exchanges of countries enjoying unrestricted freedom in the commerce of gold, as for example the United States of America and Great Britain. For the sake of precision it should, however, be added that the import and export of gold are subject to no restrictions in Switzerland and that the minting of gold coins for the account of individuals is freely allowed.

Inasmuch as the Latin Monetary Union has been dissolved and coin-

age at the Swiss Mint has been resumed, while gold and gold exchange holdings have grown greatly at the central bank, and the Swiss franc has been maintained for years at its gold parity, it would appear that all the conditions requisite for a return to the gold standard have been fulfilled and that the time has arrived when we should take advantage of this situation to amend our monetary and banking legislation.

Two considerations must govern a revision of the monetary laws:

1. The gold standard must operate in such a way that only our present gold coins are to be legal tender in unlimited amounts. The silver franc pieces must be declared subsidiary coinage.
2. The minting of gold coins must be unrestricted and shall be freely allowed for account of individuals. For the minting of fractional coins by the Federal Mint, a specific per capita allowance must be established.

As regards central bank legislation, the following three conditions are essential, in the opinion of the National Bank, for a proper adjustment of the situation:

1. The notes of the National Bank shall be not merely legal tender in the sense that they are accepted in unlimited amounts at their nominal value by the various federal offices; but they shall also be legal tender in the sense that they must be accepted everywhere in Switzerland as a medium of payment in unlimited amounts.
2. The National Bank is obligated to convert its notes. Redemption shall be made at the Bank's option in Swiss gold coins, in gold bars, or in gold exchange, *i.e.*, in checks or payments in foreign exchange at the prevailing market value, calculated in gold, of the particular currency.
3. The notes of the National Bank shall be issued only in denominations not already represented by coins. Until the country's requirements for money can be met, the National Bank will continue to put its twenty-franc notes into circulation.

What legally constitutes the gold standard today and what is practised as such varies in nearly every country professing to be on a gold basis. One fact nevertheless is clear. A pure gold standard in the sense that freedom of import and export of gold exists in conjunction with an unrestricted right of coinage and assured convertibility of notes into gold at any moment, is to be found only in the United States of America. In examining into these conditions, the import and export of gold together with its coinage should be considered on the one hand, and the convertibility of notes into gold on the other hand. In practice, of course, these represent merely two aspects of the same problem. Assuming that the gold standard is universally established through monetary legislation, some countries may permit the free importation of gold and also the unrestricted coinage of gold; others may not allow gold to be freely imported, while the privilege of coining may be vested in the central bank and denied to individuals, in which case the gold

to be coined must be bought by the bank of issue at the fixed parity price. Again some nations may set a different example by not authorizing the free importation of gold, having no free coinage, and in addition prescribing no obligation for the central bank regarding purchases of gold. There are also numerous points of difference in the regulations governing gold exports. Either there is free export of bars and gold coins (or merely of bar gold), or else the export of both coins and bars is impossible except with the consent or through the intermediary of the central institution, and even then only to a limited number of countries. When these divers regulations governing the import, export and coinage of gold are studied in relation to other regulations governing the convertibility of notes, the situation becomes even more complicated. In one country the central bank is compelled to convert its notes into gold coin; in another it must make conversion only in gold bars; in yet another it has the option of making redemption either in gold coins, gold bars or gold exchange. In the latter event, gold exchange consists of checks and transfers on those countries which permit in general an unrestricted export of gold coins and bars (or at least such export by the central bank); or on those countries which like Switzerland have declared that they will maintain their currency on a gold basis, but which convert their notes through their central banks into gold exchange alone, and not into gold metal.

It would require too much space to discuss in detail the existing régimes of the various nations, especially since legislation and practice are frequently at variance, and the central bank, either directly through statutory regulation or indirectly through government decree, is permitted to follow the policy which seems to it expedient. Only one fact deserves mention at this point, namely, that—if our observations and data are correct—no gold is in circulation in any of the gold standard countries (not even in countries such as the United States of America and the Scandinavian nations, where redemption of notes in gold coin is legally prescribed); in every instance the gold coins of the nation are held in the vaults of the reserve bank.

After these observations of a general nature concerning the gold standard and specific examples of gold standard countries, we may turn to Switzerland, where, in the light of the explanation given above of the monetary policy prescribed by our present legislation, we find that the situation existing today is as follows.

By virtue of a decree of the Federal Council of July 30, 1914, the notes of the National Bank not only are legal tender in Switzerland but are also inconvertible. To be legal tender signifies that the notes are accepted universally as a medium of payment; to be legally inconvertible (or, in other words, to be compulsory legal tender) means

that the notes do not have to be redeemed by the issuing bank. A legal tender status is implied in the term "Zwangskurs" (forced convertibility). But a status of inconvertibility is also implied in the term "legal tender" (and in this respect the Federal Council decision of July 30, 1914, is fully within the meaning of the Constitution) in that even the central bank of issue, when making payment, may point to the fact that its notes are legitimate and compulsory media of payment, thus preventing the recipient from demanding redemption in gold. When a country's banknotes are made legal tender by statutory provision, the law ordinarily contains a clause to the effect that the notes are not legal tender for the central bank, which is expressly obligated to redeem its notes in gold. A legal provision of this kind concerning the nature of the National Bank notes might serve as a principle in our future National Bank legislation. It involves nothing more than what has applied in England for nearly a hundred years to the notes of the Bank of England, in France for more than fifty years to the notes of the Bank of France, and to practically all other central banks in the more recent legislation governing banks of issue. The notes of the Federal Reserve Banks of America constitute the only important exception. This, however, is explained by the fact that there is no one central bank in the United States, and by the further fact that in addition to the twelve Federal Reserve Banks a large proportion of the national banks issue notes, while gold and silver certificates are also in circulation.

Inasmuch as there is no longer a wartime emergency as described in Article 39, Section 6, of the Constitution and (as regards inconvertibility) in Article 22 of the banking law now in force, the decree of the Federal Council dated July 30, 1914, should be repealed at the earliest possible moment. Such repeal is not feasible, however, until the existing monetary legislation has been amended. A simple repeal of the decree of the Federal Council would create an untenable situation for the National Bank in that it would then be compelled to convert notes into gold or silver specie at a time when, owing to the dissolution of the Latin Monetary Union, the juridical status of Swiss gold and silver coins is quite obscure. Silver currency, moreover, does not today exist in sufficient quantities to meet current requirements, and if redemption of notes in silver coins is to be excluded, a legislative act to that effect would first be necessary. However, a repeal of the Federal Council decision in question is rendered impossible not only by legal and technical circumstances, but also by the fact that the National Bank is not today in a position to insure unlimited convertibility of its notes into gold coin.

It is naturally difficult to estimate to what extent a proclamation

of gold convertibility would result in loss of gold to the National Bank. It is possible that the mere declaration that gold is available at all times at the Bank would suffice to keep it there. But the fact that the approximately 100 million francs in gold coin which were put in circulation by the National Bank at the time of the so-called "capital levy" in 1922 disappeared in the shortest space of time, and the fact that 200 million francs of Swiss gold coins are today outside the vaults of the National Bank and are held almost exclusively in Switzerland, without resulting in more than a purely nominal gold circulation in the country, point to the inevitable conclusion that the hoarding of metal has not yet reached the saturation point. It should also be remembered that German exchange, or the exchange of any other country with which we are in close touch, may suddenly become very strong so long as it represents a manipulated and inconvertible currency instead of one subject to natural movements. The National Bank could not keep the Swiss franc constantly at par with these other exchanges. The result would be that the gold and gold exchange reserves of our little country might easily be drained to a point where stability of the currency, maintained so consistently thus far, would be jeopardized. Our experience in connection with the influx of gold coins up to 1927, with the Swiss franc at parity or slightly above parity, gives cause for reflection. The National Bank maintains, therefore, that for the time being it will have satisfied all legitimate demands for gold by leaving in circulation the gold coins not now in possession of the Bank and by continuing its unrestricted sales of foreign exchange within the gold points. At least temporarily this policy must be adhered to.

The National Bank would like to be assured that future legislation will make some smooth provision for the convertibility of notes. For this reason the Bank insists that it shall be within its province to determine whether and when notes are to be fully convertible into gold. The National Bank's conception of note convertibility is in principle identical with the solution proposed by the Zurich Chamber of Commerce in its petition to the Finance Department. The Zurich Chamber of Commerce is in favor of a banking law, which, while establishing the principle that the National Bank is to make redemption of its notes in gold coin, shall provide for redemption, under certain special circumstances, in gold coin, gold bars or gold exchange at the central bank's option. Specifically, the danger of the gold reserves suffering undue depletion through the flight of gold coins abroad would constitute a special circumstance. The National Bank for its part would like to avoid too subtle distinctions which can in practice scarcely be applicable to all situations. It therefore goes a step further than the Zurich Chamber

of Commerce. In harmony with the recent German, Belgian and Italian monetary laws, to mention only a few, the National Bank supports the principle that full discretion should be conferred upon the responsible central bank authorities: for only by choosing the means of fulfilling their legal obligation to maintain the stability of the currency will they be enabled fully to assume that responsibility which is incumbent upon them.

The management of the Bank is aware that critical estimates of the Swiss monetary system will vary according to whether the Bank converts its notes into gold or merely into gold exchange. It wishes to proclaim convertibility into gold and a return to the full gold standard as soon as the advantages of that course are no longer offset by greater disadvantages to interest rates, circulation, and currency. The Bank will, however, support at once a law obliging it to maintain the Swiss franc between the gold points and requiring the repayment upon demand of such gold as comes to it from the internal circulation of the country. In the Bank's judgment, the new ordinance should be passed simultaneously with the repeal of the decree of the Federal Council of July 30, 1914. This procedure would cause no immediate alteration in the *modus operandi;* nor is that demanded by the Zurich Chamber of Commerce, by the Swiss Bank Union in its monthly bulletins, or by the Meyer bill now before the National Council. It would, however, be considered abroad as a definite step in the direction of Switzerland's return to not merely a *de facto* but a legal gold standard for its currency.[3]

G. Bachmann

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[3] Since the president of the Swiss National Bank wrote the article published above, the shareholders of the National Bank voted on March 2, 1929, a recommendation for the amendment of the monetary law of Switzerland, providing in substance: (1) that the notes of the National Bank be unlimited legal tender; (2) that the metallic reserve be fixed at 40 per cent of notes in circulation, the entire reserve to be held in Switzerland; (3) that convertibility be effected at the option of the National Bank, into Swiss gold coin, gold bars, or gold exchange on countries possessing a free gold market.

It is believed that these amendments have the approval of the Swiss government and will shortly be made law. Switzerland will then be numbered among the gold exchange standard countries as regards the convertibility of its bank notes.

THE EARLY HISTORY OF THE LONDON STOCK EXCHANGE

Though the Stock Exchange, as a definitely organized body, was not founded until 1773, it had been in existence in the sense of a continuous and organized market for dealing in securities for about a century before that date. Like so many British economic institutions it owed nothing to deliberate creative action by the government, but it developed autonomously to meet the needs which the progress of industry and finance were creating. The increase in the amount of capital and the widening of the market, brought about by the commercial revolution consequent upon the great geographical discoveries, led to the growth of the joint stock company for carrying on trade and industry. While at first there appears to have been little transference of the capital so subscribed, the necessity for permanent subscriptions soon led to the rise of dealings in the shares of the companies. This was encouraged by the scope for speculation arising from the enormous variations in the profits realized. This development was not purely a British phenomenon, for the same thing took place in Holland, which in the seventeenth century was the commercial and financial center of Europe.

The Dutch East India Company, founded in 1602, was typical of the early joint-stock companies. It had, in the latter part of the century, a capital of 6,300,000 florins, divided into 2,100 shares of 3,000 florins each. The dividends on these shares fluctuated widely, and as a result, continual speculation took place in them, as their value varied on account of commercial and political changes. And this speculation was not confined to direct buying and selling, but "time-bargains" were well known. In the "*Mémoire Touchant le Négoce et la Navigation des Hollandaises*,"[1] published in 1699, it is said "sans avoir d'actions, ni méme envie d'en acquérir, l'on en peut faire un grand négoce, et effectivement il n'y en a jamais eu de plus fort."

In Great Britain a similar development had taken place. The seventeenth century witnessed a great growth of the joint-stock company, and at the end of the century there existed 140 joint-stock companies, with a total capital of £4,250,000, though three-quarters of this belonged to the six most important companies. At the same time the growth of trade and industry and the development of banking had both increased the amount of capital seeking investment, and had developed the habit of investment, the latter result being aided by the change in habits of thought in regard to finance which followed upon

[1] Izaak Loyson. Quoted by H. Sée, *Les Origines du Capitalisme Moderne*, p. 74.

the Reformation and the growth of Puritanism.[2] The scope for investment was still further widened by the introduction by William III of the so-called "Dutch Finance" *i.e.*, the development of government borrowing by means of annuities, lotteries and tontines. These offered a wide scope for speculation, for their value fluctuated with changes in the government's credit and with the value of the lives upon which they were secured. It has been said that the origin of stockbroking can be traced to these developments. Thomas Mortimer, the author of the first book upon the mechanism of the Stock Exchange, in a lecture published in 1801,[3] says with reference to government annuities:

> The brokers employed to transfer these funds from one person to another are called *stockbrokers;* and their commission for buying and selling is £1/8 for every £100, exactly the same as is taken by the agents of the Bank of Amsterdam for changing bank assignments into current money; and this is the true origin of the funding system and of the generation of stockbrokers.

Whether this be so or not (and it appears to be only one of several lines of development), it is quite clear that in the last decade of the seventeenth century, a continuous market for the exchange of securities was in existence, and that a class of brokers had grown up, sufficiently well recognized to have a regular tariff, varying from 10 shillings to 5 shillings per share.[4] Regular quotations of the prices of the funds and the principal stocks were given in Houghton's Collections,[5] and in 1694 there is mention of "time bargains."[6] Francis, in *Chronicles and Characters of the Stock Exchange*,[7] traces the origin of such bargains to

> the period of six weeks in each quarter when the Bank books were—as it was then thought—necessarily closed to prepare for the payment of the dividend. As no transfer could be made during this period, it naturally enough became a practice to buy or sell for the opening. . . . . As in these transactions the possession of stock was unnecessary, and the payment of the difference in price was sufficient, bargains became common. . . . .

It appears, however, from what has been said above, that such bargains had already developed in Holland, and it is not impossible that the method had been copied from that country, or that it was in England, as in Holland, a natural development arising from surrounding circumstances. In any case it is clear from the terminology in

[2] See R. H. Tawney, *Religion and the Rise of Capitalism.*

[3] Thomas Mortimer, *Lectures upon the Elements of Commerce, Politics and Finance*, 1801, p. 397.

[4] Houghton, *Collections for Improvement of Husbandry and Trade*, nos. 99, 101, 1694.

[5] See W. R. Scott, *Joint-Stock Companies to 1720*, vol. I, p. 351.

[6] Houghton's Collections, July 13, 1694.

[7] J. Francis, *Chronicles and Characters of the Stock Exchange*, pp. 71-2.

use that such methods of dealing were fully understood; for the terms "put," "refusal," "bears," etc., are frequently used.[8] Further evidence is to be found in the Act of 1697[9] which authorized an increase in the capital of the Bank of England, and which contained a clause invalidating all contracts for the sale of government stock which were not registered within seven days, and the stock transferred within fourteen—an obvious attempt to restrain dealings in margins.

At first the dealing in stocks was carried on in the Royal Exchange, in which dealers in stocks were allotted a "walk" in the same way as the dealers in various sorts of merchandise. But the increase in their numbers, together with the opposition aroused by their real and imaginary malpractices led to a movement to expel them.[10] In consequence they moved their place of business to certain neighboring streets —the ill-famed "Change Alley" of the "Bubble" period. Change Alley was thus described by Defoe in 1719:[11]

> The centre of the jobbing is in the kingdom of Exchange Alley and its adjacencies. The limits are easily surrounded in about a minute and a half, *viz.*, stepping out of Jonathan's into the Alley, you turn your face full south; moving on a few paces, and then turning due east you advance to Garraway's; from thence going out at the other door, you go on still east into Birchin-lane, and then halting a little at the Swordblade Bank, to do much mischief in fewest words, you immediately face to the north, enter Cornhill, visit two or three petty provinces there in your way west; and thus having boxed your compass and sailed round the whole stock-jobbing globe, you turn into Jonathan's again.

The exact position of the stockbroker at this period is one of some uncertainty. It seems clear, however, that dealing in securities was not yet a completely specialized occupation. The chief operators were not dealers by profession, but a class which had come to be known as the "monied interest," who employed agents to carry out their trans-

[8] Cf. Macpherson, *Annals of Commerce*, vol. II, p. 663. Writing of the year 1694, he says, "These newfangled or cant terms (put or refusal) were first brought into use by the Company."

Defoe, *The Anatomy of Exchange Alley*, 1719, "buyers of bearskins;" C. Cibber, *The Refusal*, 1727, Act I, Sc. 1, "All out of Stocks, Puts, Bulls, Rams, Bears and Bubbles."

[9] Statutes III, p. 227.

[10] Anderson, *Origin of Commerce*, vol. II, p. 642. Under Anno 1698, "Writers about this time complain heavily, That the Royal Exchange of London was crowded with projects, wagers, fairy-companies of new manufactures and inventions, stock-jobbers, etc. So that very soon after this time, the transacting of this airy business of jobbing, was justly removed from off the Royal Exchange into the place called Exchange Alley, and since into a building created on purpose, and called the Stock Exchange, where it is now carried on."

[11] *The Anatomy of Exchange Alley, or A System of Stock Jobbing.* This pamphlet, published anonymously in 1719, is the work of Defoe. It is printed as an Appendix by Francis, *op. cit.*, p. 359.

actions.[12] In a play of the period[13] a stockholder is represented as saying, on seeing two gentlemen entering Jonathan's coffee house, "I would fain bite that spark in the brown coat; he comes very often into the Alley, and never employs a broker." These things seem to show that there was a considerable amount of business carried on without the intermediacy of a broker. Yet undoubtedly there was a specialized class of brokers developing. As we have already seen, it appears from Houghton's Chronicles that there was a regular tariff for dealing in securities in 1694; and Duguid[14] quotes a description of a broker from a pamphlet of 1707 to the following effect:

Brokers of stock are such as buy and sell Shares in Joint Stocks for anyone that shall desire them; as if I am minded to buy two shares in *East India* Stock, I speak to a broker if he knows of any to sell, he enquires and finds one that will sell two shares, which he buyeth for me at the Price currant on the Exchange, and when the same are transferred to me in the Company's Books, I pay for them. And it has been usual to give these Brokers for their Brokerage or Provision as followeth: For *Hudson Bay* Stock, £1 per share: for *East India* Stock, 10/— per share: *Africa* Stock or other petty Stocks as Glass, Lead, Linnen, Copper, etc., 5/— per share. And at this rate there are some have got £1000 or £1500 per An.

In this the broker appears in a very modern light. Some difficulty arises from the indiscriminate use in contemporary writings of the terms "jobbing" and "broking" to describe dealings in stocks. It seems clear that there was some distinction, though it was not the same as that of the modern usage. Thomas Mortimer, in what appears to be the earliest guide to the Stock Exchange,[15] distinguishes between stockjobbers, "having property in the funds," and stockbrokers "with very little and often no property in the funds, who job in them on credit, and transact more business in the several government securities in one hour, without having one shilling of property in any one of them, than the real proprietor of thousands transacts in several years." But this distinction hardly seems to have been the fundamental one, for at least in the earlier period, it seems to have been the jobber who was the large dealer in credit. This is borne out by Defoe's pamphlet,[16] in which it is stated that as the result of one of the transactions which he is criticizing "the jobber has got an estate, the broker two or three hundred guineas . . . .;" from which it would

[12] *The Consolidator or Memoirs of Sundry Transactions from the World in the Moon*, 1705, pp. 256-257.

[13] Mrs. Centlivre, *A Bold Stroke for a Wife*, 1717, Act. IV, Sc. I.

[14] Charles Duguid, *The Story of the Stock Exchange*, 1901, pp. 22-3.

[15] T. Mortimer, *Every Man His Own Broker, or A Guide to Exchange Alley*, 1761, 2nd ed., 1761, p. 36.

[16] *The Anatomy of Exchange Alley;* see Francis, *op. cit.*, p. 361.

appear that the broker had been a mere intermediary, rewarded by a commission on the transactions which had passed through his hands. This same distinction appears in writings of a much later date.[17] The differentiation between the jobber and the broker in the technical sense was a nineteenth century phenomenon.

The growth of the stockbroking and speculation early led to attempts by the government to exercise some control over the brokers. The first Act of this nature was that of 1697[18] entitled "An Act to restrain the numbers and ill-practices of stock-jobbers." The preamble of the act states:

> Whereas divers brokers and stock-brokers have lately set up and carried on unjust practices in selling and discounting tallies, Bank stock, Bank bills, shares and interest on joint stock, and other matters, and have and do unlawfully combine to raise and fall the value of such securities for their own advantage; and whereas the number of such brokers and stock-brokers are very much increased within these few years, and do daily multiply,

and the Act goes on to prohibit anyone acting as a broker "until licensed by the lord mayor and court of aldermen of the said city of London," and to limit the number to 100. Brokerage was limited to 10/- per cent, and very heavy penalties were imposed for breaches of the Statute. The Act, originally passed for three years, was at the end of that time renewed for a further seven, but at the expiration of that period, it was allowed to lapse in spite of a strong agitation for its renewal. Its place was taken by an Act[19] imposing a tax of 40/- per annum upon stockbrokers. In 1711[20] the brokerage was reduced to 2/9 per cent, under penalty of £20 for each offense. In 1719, an Act[21] ". . . . restraining several extravagant and unwarrantable practices" forbade the "practice of acting as corporate bodies to raise and transfer stock except by permission granted by Act of Parliament or Charter," and brokers buying or selling such shares were to be punished.

These acts appear to have been called forth by the public attention drawn to dealings in securities by the commercial crises and financial difficulties of the time which manifested themselves in the growth of speculation. The commercial crisis of 1696-97, caused by inflation and the costs of the war, following on the period of rapid formation of new companies, naturally led to the collapse of many of them. As these things were accompanied by a great outburst of speculation

[17] *A General Commercial Dictionary*, 1819, pp. 169, 351.
[18] 8 & 9 William III, c. 32.
[19] 6 Anne, c. 16.
[20] 10 Anne, c. 19.
[21] 6 Geo. I, c. 18.

in the shares of the companies, there was a tendency for public opinion to confuse cause and effect, and to attribute the series of failures to the growth of stock-jobbing. The Commissioners of Trade, in their "Report on the Present State of Our Trade"[22] in 1696, said:

> The pernicious art of stock-jobbing hath, of late, so wholly perverted the end and design of companies and corporations, created for the introducing, or carrying on, of manufactures to the private profit of the first projectors, that the privileges granted to them have, commonly, been made no other use of, by the first procurers and subscribers, but to sell again with advantage, to ignorant men, drawn in by the reputation, falsely raised, and artfully spread, concerning the thriving state of their stock. Thus the first undertakers, getting quit of the company, by selling their shares for much more than they are really worth, to men allured by the noise of great profit, the management of that trade and stock comes to fall into unskillful hands: whereby the manufactures, intended to be promoted by such grants, and put into the management of companies for their better improvement, come, from very promising beginnings, to dwindle away to nothing, and be in a worse condition than if they were left perfectly free, and unassisted by such laws or patents; an instance, thereof, we humbly conceive, is to be found in the paper and linen manufactures, which, we fear, feel the effects of this stock-jobbing management, and are not in so thriving a condition as they might have been, had they not fallen under this kind of misfortune.

Similarly they express the opinion that the fisheries would not improve until a company could be erected "upon such terms as may secure the management of it from the destructive shuffling of the stock-jobbing." It was further complained, as in the Act of 1697, already mentioned, that the brokers "confederated themselves together to raise the price of stocks." This accusation was common in the writings of the times, and the government's financial difficulties, bringing with them an increase in the national debt and great fluctuations in the price of government tallies and loans, were also looked upon as being in some way due to the evil practices of speculators. What was really aimed at was control over promoters, who were able to carry out their nefarious practices through the mechanism of the stock exchange.

A better founded complaint was that of manipulation of the market. Certain of the larger dealers had established private intelligence services by which they were able to get information in advance of the rest of the dealers. Not only that, but they disseminated false information in order to create a market favorable to their plans.[23] Defoe writes:[24]

> There are those who tell us letters have been ordered by private management, to be written from the West Indies, with an account of loss of ships which have been arrived there, and the arrival of ships lost; of war with the Great Mogul, when they have been in perfect tranquillity; and of

[22] *Journal of the House of Commons*, vol. XI, p. 595.
[23] Francis, *op. cit.*, p. 23.
[24] See Francis, *op. cit.*, p. 365.

peace with the Great Mogul, when he had come down against the factory of Bengal with one hundred thousand men—just as it was thought proper to calculate those rumours for the raising and falling of the stock, and when it was for his purpose to buy cheap, or to sell dear.

If Sir F—— had had a mind to buy, the first thing he did was to commission his brokers to look sour, shake their heads, suggest bad news from India . . . . till perhaps the stock would fall 6, 7, 8, 10 per cent, sometimes more. Then the cunning jobber had another set of men employed on purpose to buy, but with privacy and caution, all the stock they could lay their hands on. . . . .

Again in an earlier pamphlet[25] Defoe had written that East India stock "within ten years or thereabouts, without any material difference in intrinsick value, has been sold from £300 per cent to £37 per cent from whence, with fluxes and refluxes as frequent as the tides, it has been up to £150 again."

Professor Scott has shown, however, that the effects of such manipulation were much smaller than appears from these accounts:[26]

It is to be remembered that the investment of capital was subject to immense risks. So much depended upon the issue of the war that the future of Bank stock and of the obligations of the government was exceedingly uncertain. East India stock, again, was not only subject to special risks during hostilities, but, in addition, accordingly as the expected settlement of the trade was favourable or unfavourable to the Company, its securities in five years from 1697 might be worthless, or selling at 200 to 300. In purely domestic undertakings, all the disappointments that are encountered in starting a large number of new industries simultaneously, were to be anticipated. In view of these factors, all of which tended to produce great instability of prices, it is remarkable that the quotations display so little of the see-saw movement due to market manipulation, but on the contrary follow well defined lines of movement, the causes of which can generally be traced. . . . .

Nevertheless a considerable degree of odium became attached to the pursuit of stock-jobbing, and this, together with the restrictive legislation of 1697, and the financial stringency consequent upon the crisis of 1696-97, led to a period of quiescence. Newspapers which had quoted changes of prices on the stock market discontinued the practice; even Houghton, who in 1694 had printed the names of fifty securities in his list, in 1698 reduced it until quotations of only seven securities were included. But the great increase in government borrowing during the War of the Spanish Succession,[27] the revival in trade bringing with it the promotion of new companies, and the development of

[25] "The Villany of Stock-Jobbers Detected," in *True Collection of the Writings of the Author of the True-Born Englishman*, 1703, p. 257.

[26] W. R. Scott, *The Constitution and Finance of English, Scottish and Irish Joint-Stock Companies to 1720*, vol. I, pp. 358-359.

[27] The National Debt increased from £16,394,702 in 1702 to £52,145,363 in 1713: see W. J. Lawson, *The History of Banking*, 1850, p. 471.

insurance[28] led to a further vast outbreak of speculation, which again turned the attention of public opinion and the government to the actions of the stockbroker.

Then came the "Bubble Era" with all its financial extravagances and a mania almost, if not quite, unrivalled in any period. Naturally the frenzied dealings in securities and the financial chaos which resulted, once again drew attacks upon the dealers in stocks, and there was a vast output of poems and pamphlets calling attention to the evil practices of stock-jobbers. These attacks culminated in the Act of 1733—Sir John Barnard's Act—entitled "An Act to prevent the pernicious practice of stock-jobbing."[29] This act was aimed at some of the most characteristic practices of the brokers—time-bargains—and stated that "whereas great inconveniences have arisen by the wicked and pernicious practice of Stock-Jobbing," all contracts "under which a premium is given for liberty to put upon, or to deliver, receive, accept or refuse any public or joint-stock . . . . and also all wagers or contracts in the nature of wagers, and all contracts in the nature of puts or refusals, relating to the present or future price or value of any such stock . . . . shall be null and void." A penalty of £100 was imposed upon the giving of money to compound differences relating to stock not actually delivered; and a penalty of £500 for selling stock which the seller did not possess. Further every broker was ordered to keep "a Book or Register, known as the *Broker's Book* in which he . . . . shall enter all contracts." The Act was passed for three years, but at the end of that period it was made perpetual,[30] and actually remained in force till 1860.

That the Act was ever very effective in putting a stop to the practices which it condemned there is no evidence to show.[31] On the other hand it is certain that dealings in securities increased steadily, and the failure of the Act seems to be borne out by the fact that a bill "more effectively to prevent the infamous custom of Stock-Jobbing"[32] was considered in 1746, but rejected, and that in 1756 Sir John Barnard introduced a bill "to render more effective the Act 7 Geo. II c. 8" which was also rejected.[33] The suspicion with which dealings in securities were looked upon is shown by the fact that Malachy Postlethwayt in his *Universal Dictionary of Trade and Commerce* (2nd ed., 1757)[34] entitled his

[28] The Hand-in-Hand Society was established in 1696; the Amicable in 1706; the Sun Fire and Life Office in 1710: see J. Francis, *Life Assurance Annals, Anecdotes and Legends*, 1853, pp. 59, 61.

[29] 7 Geo. II c. 8.

[30] 10 Geo. II. c. 8.

[31] Mortimer, *op. cit.*, preface, p. vii., "The Bubbles are indeed burst, and the Race-Horses of Exchange Alley long since dead, but Bears and Bulls still subsist."

[32] House of Commons Journals, vol. XXV, p. 147.

[33] House of Commons Journals, vol. XXVII, p. 566-590.

[34] *Ibid.*, vol. II, p. 763-5.

article on stock-jobbing "Plain Reasons Why Stock-Jobbing Has Been and Still Continues to Be Detrimental to the Commerce of This Nation." The twelve reasons are divided into two groups, firstly, "In relation to trading companies whose stocks have been jobbed in, without due regard to the advancement of the commerce of the nation;" and secondly, "The injurious effects of stock-jobbing with regard to the public revenue funds." Under the first heading, stock-jobbing is accused of causing fluctuations in shares of being the parent of bubbles; of having brought distress through the South Sea and Mississippi schemes; of damaging credit by causing fluctuations in shares; of causing companies to act imprudently and so to bring danger of war; of causing proprietors to be more interested in jobbing than in carrying on business; of injuring private credit by causing money to be used for jobbing, "whereby industries and skillful traders were deprived of credit." Under the second heading he states that the public funds engross money which should be employed in trade, and cause long credit which ruins the merchant and manufacturer; that jobbing in the funds discourages trade; that funding and stock-jobbing lessen the commerce of the nation; and that they give foreigners an opportunity to damage trade.

But in spite of such attacks, stockbroking was establishing itself. After 1733 there was no further legislation against stockbrokers. Mortimer, though a strong opponent of jobbing, as is shown in his book written in 1761, could write in his "Lectures on the Elements of Commerce, Finance and Politics," published in 1801,[35] "This is an evil of the first magnitude, yet it has hitherto been found impracticable to apply an adequate remedy, without injuring the public credit of the funds, by checking the operation of the open market for them at the Stock Exchange." This is a clear recognition of the economic function of the Stock Exchange in providing a free and continuous market for capital. Similarly, the change in opinion is shown by the relaxation of the attempts to control the brokers. In spite of the legislation to the contrary, it is clear that transactions had been carried on without the agency of a licensed broker. In what may be termed the first guide to the Stock Exchange, it was stated "It is a general remark that two-thirds of the people that are constant attenders at the books on the transfer days, and are known to be jobbers, are not legal brokers."[36] But there had always been a general presumption that government stock could only be transferred through the medium of the brokers licensed by the City of London.

In 1767, however, two cases brought by the Chamberlain against pur-

[35] Lecture IV, "On Stock-Jobbing," p. 414.

[36] T. Mortimer, *Every Man His Own Broker*, 1761. The quotation is from the 7th ed., 1769, preface, p. viii, note.

chasers of stock otherwise than through a broker licensed by him were decided against him, and it was declared that government stocks could be bought or sold without the intervention of a broker. This decision gave a considerable stimulus to the growth of stockbroking by bringing it within the range of respectable occupations. The same tendency is seen at work when some of the larger and more reputable dealers tried to separate themselves off from those who had brought the business into disrepute, by establishing a definitely organized body with a code of rules and regulations which would guarantee the respectability of those belonging to it.

At this time business was still carried on in Exchange Alley, centering in Jonathan's and Garraway's coffee houses. Even when the Alley was destroyed by fire in 1748, there was no departure from this practice, and the Alley was rapidly rebuilt through the subscriptions of the brokers. But in 1761 Mortimer[37] writes, "The gentlemen at this very period of time . . . . have taken it into their heads that some of the fraternity are not so good as themselves . . . . and have entered into an association to exclude them from J——'s coffee-house." It was found, however, that it was impossible to enforce this policy of exclusion, and as Jonathan's was now too small for the amount of business to be transacted, this "organized nucleus of brokers"[38] decided to move to an establishment of their own, situated at the corner of Threadneedle Street and Sweetings Alley, which was for the first time formally described as the "Stock Exchange." This movement was accompanied by the drawing up of a body of rules for the conduct of business and the settlement of disputed bargains.

The new Stock Exchange became the recognized center for all dealings save those in government stocks, which continued to be carried on in the Rotunda of the Bank of England, as they had been since its building in 1764. The new Exchange was still open to all who were prepared to pay the sixpence a day charged for admission. With the growth in the respectability of the profession, and the increased business arising from the growth of the government debt and the boom in canal shares, it became necessary still further to tighten up the organization. This was effected in 1802 when the predecessor of the present Stock Exchange was built in Capel Court, and membership regulations made which excluded those whose standing was open to question. These, together with the failures from the House, remained without to become the "little-go" or "alley-men" of the early nineteenth century.[39] Thus by the period when the great demands for capital to finance the inven-

[37] *Op. cit.*, 2nd ed., 1761, p. xlv.
[38] Duguid, *The Story of the Stock Exchange*, p. 60.
[39] Clapham, *An Economic History of Modern Britain*, I, p. 302.

tions of the "Industrial Revolution" arose, the Stock Exchange had become a fully developed organization—a "market for capital" capable of meeting the demands upon it from home and foreign sources, a fact which had no inconsiderable influence in the raising of London to the position of monetary center of the world.

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PROFESSOR IRVING FISHER ON INCOME, IN THE LIGHT OF EXPERIENCE

In a recent article, Professor Irving Fisher has brought once more before the attention of economists, the perplexing problem as to what constitutes the best scientific definition of income.[1] The need for a solution of this intricate question grows more pressing as time passes; for the income tax has won for itself a firm place in the taxation systems of most of the civilized world. The excellent work of the National Bureau of Economic Research, has contributed much in bringing out the theoretical issues involved. The article by Professor Fisher falls naturally into two parts, the first being a general summary and defense of his own theory of income, while the second deals with experience with the income concept at the hands of tax experts and statisticians. It will be convenient to discuss the paper from these two viewpoints.

The Theoretical Analysis

In so far as they have written on the subject of income, economists may be divided into two major groups, those who hold what may be called consumption-income concepts and those who believe that consumption plus additions to capital (savings) should form the basis of the income definition. The first group may be subdivided into two minor classes, those writers who define income as the acquisition of consumable commodities and services and those who insist that income is not received until the consumption-income actually yields its services; income is then defined as a flow of services. Professor Fisher holds this latter view although he believes that for taxation or other practical purposes, it is neither necessary, nor wise to press the analysis that far. To the second major group belong the members of the National Bureau of Economic Research. Under that concept of income, *all* commodities and services received by an individual (or group of individuals) through a period of time must be classed as income—production goods as well as consumption goods. Since the acquisition of durable production goods constitutes additions to capital or savings, the central point at issue is the wisdom of including savings as a part of income. For convenience we shall call Professor Fisher's definition of income the *service definition* and the definition here defended, the *commodity and service definition.* I am convinced that these two ways of defending income, are, from the scientific and logical standpoint, equally meritorious; the choice between them is largely a matter of practical advantage or con-

[1] Irving Fisher, *The Income Concept in the Light of Experience.* English reprint. The original of this article was in German in vol. III of the Wieser Festschrift, *Die Wirtschaftstheorie der Gegenwart,* 1927, Vienna.

venience. The reason for this position is that both definitions count additions to capital investment income, but select different points at which to make the inclusion. Therefore in any terminating income series over a period of years, *i.e.*, a series that is brought to an end by the consumption of the capital investment itself, the total incomes calculated under each of the two income definitions must be the same allowing for the error that may enter the calculations because of shifts in the value of money. This point can be made clear only by a careful analysis of the intricate theoretical implications of the two competing income concepts.

Under Professor Fisher's definition of income as a flow of services, no income is secured by an individual (or a group of individuals) until a service is rendered. But what are services?

> The services of an article of wealth are the desirable changes effected (or the undesirable changes prevented) by means of that article. For instance, the services of a loom consist in changing the yarn into cloth, or what is called weaving. Similarly, a plow performs the service of changing the soil in a particular manner; a bricklayer, of changing the position of bricks.[2]

However, almost every income item is one or the other side of an interaction; it is a service from one side, but a disservice from that other.

> We credit the production of logs, ... to the logging camp and debit the self same item to the lumber yard. We credit the sale of lumber to the yard and debit it to the purchaser's stock of lumber and so on until we reach, say, the shelter of a resulting dwelling. . . . . In fact the only items which are not interactions are psychic satisfactions, which are positive only, and psychic sacrifices (labor) which are negative only.[3]

In practice we can reach very nearly the same result by stopping slightly short of this theoretically ultimate stage—the services of consumption goods, rather than the psychic satisfaction secured from their consumption. Material commodities have no place in the definition. Income is secured when net services are rendered. The process of balancing service against disservice leaves net income in the form of the services of directly consumable goods and the personal services of human beings, "food, drink, clothes, furniture, household rent, fuel and light, amusements, etc."[4] The simplicity and logic of the service definition are undeniable; but, as I have shown elsewhere,[5] objections can be raised against it serious enough to prohibit its general acceptance. For our present purpose (*i.e.*, actual experience with the income concept) the

[2] *Ibid.*, p. 3.

[3] *Ibid.*, p. 5.

[4] *Ibid.*, p. 15.

[5] "The Definition of Income," American Economic Review, June, 1925. *The Definition of Income and Its Application in Federal Taxation*, Westbrook Publishing Co., Philadelphia, 1925.

important objection is that the definition fails to conform to the usage of the market place and therefore introduces confusion instead of clarity into the problem of income definition. The service definition involves the following basic assumptions:

(1) Savings are not income; outgo (disservice) equals the investment giving a net income of zero.

(2) Depletion of capital must not be deducted from income; depletion does yield direct services.

(3) The net income concept becomes synonymous with the services of consumption goods.

Let us consider these theoretical assumptions from the viewpoint of their conformity with current usage.

(1) Assume A and B two college professors, each earning five thousand dollars a year. A spends his entire salary for directly consumable goods and services while B saves one-half his salary, purchasing with the other half, Pennsylvania Railroad stock. According to the definition of Professor Fisher, A has an *income* of five thousand dollars, while B has an *income* of only two thousand five hundred dollars. Thus the two men may earn the same salary and yet have very different incomes! John D. Rockefeller would be much surprised to find that instead of receiving a very large net income of many millions of dollars each year, he really secures but a few thousand dollars in income—his actual expenditures for directly consumable goods and services. The bulk of his gains, being invested, are not income. He would give a real sigh of relief when the time for making out his income tax return arrived. The deduction of savings in the calculation of income is far removed from current usage.

(2) However, depletion of capital must not be deducted from income under the service definition, since depreciation or consumption of capital does yield net services. "If a man has his capital invested in the form of a house which yields him rent, this actual rent, less any actual expenses for repairs, taxes, etc., is his income from the house, *even though the house may be depreciating in value*."[6] And again, "We have already warned the reader against the fallacy of deducting from income any depletion of capital."[7] A business man who experienced a bad year in business and was forced to sell part of his capital to pay the cost of his normal family living expenses, would be amazed to learn from Professor Fisher that he had a rather large income that year after all, since his capital depletion must not be deducted from his income total. In fact a man could actually lose a large sum of money in the operation of his business and yet by failing to keep up his capital depreciation account, show a very satisfactory income at the end of the

[6] Irving Fisher, *The Nature of Capital and Income*, p. 110. (Italics are mine.)

[7] *Ibid.*, p. 134.

year. One can imagine the cries that would be lifted to the skies by such an individual on being forced to pay an income tax on his depreciation of capital! But Professor Fisher is forced to take this unique position, since he has ruled out savings from his income concept and the only chance he has to catch as income the *gain* that went into the savings, is at the point of capital consumption.

(3) Finally, as we have already implied above, an income tax based on Professor Fisher's definition of income would become in practice what is popularly called an expenditure or consumption tax. In his article Professor Fisher takes exactly that position.[8] He suggests that our income tax law be modified so that it may be made to conform with his own definition, and he agrees that this would amount to a "spendings tax."[9] Most persons will agree with Professor Fisher that "science cannot dictate to popular usage. But neither can popular usage dictate to science." Yet it must be remembered that the concept of income is deeply imbedded in the language of our everyday business world, our legal structure, and our political organization. It is quite unreasonable for an economist to say to the general public, "What you designate as income, is in fact not income at all; your income tax law taxes the wrong thing." The fact remains that the income tax law resulted from a desire to apply the principle of taxation known as the ability to pay, to the taxation of the economic gains acquired by citizens annually. It is an attempt to tap the net gains of the taxpayers. It is not, and never was, an attempt to establish a tax on consumption or on expenditures for consumption goods. Professor Fisher may be correct in stating that a tax on a consumption or expenditures basis would be more desirable than the present income tax; certainly there are some very decided advantages in such a change. But the desirability of such a tax should be settled on the broad basis of taxation policy and equity, and not by the subtle method of changing the definition of income. It is not the technical meaning of a word, but the intent of legislators that should determine a taxation policy. We must keep separate the two very different problems of theoretical definition and fundamental taxation policy.

Since the definition of income in terms of all commodities and services, avoids the implications of the service definition and consequently conforms better with current usage, let us examine the objections to it raised by Professor Fisher. The chief objections are that savings are classified as income and that depletion of capital is a deductible item. Every commodity produced and every service rendered during a given period of time is income regardless of its disposition, whether it is saved

[8] *The Income Concept in the Light of Experience, op. cit.*, p. 16.

[9] *Ibid.*

or used to secure directly consumable goods. Income must, therefore, accrue before saving can take place. Professor Fisher charges that this involves double counting, since one counts savings as income and then subsequently counts also as income the interest received on these same savings. "Suppose that, in a given year, a man receives an income of $200,000 from stocks and bonds and reinvests $150,000 of it in real estate. What is his income?"[10] According to the service definition of income, the answer is $50,000—total receipts less savings. Under the commodity and service definition, the amount is $200,000—the $150,000 saved plus the $50,000 spent. Now each year this individual will receive, in addition to the $200,000 from his stocks and bonds, $7,500 (assuming a 5 per cent yield) from his real estate investment. Is it double counting to count as income the $150,000 saved and the $7,500 each year?

The decisive reason . . . . for approving as correct the accounting whereby the $150,000 of savings is omitted . . . . is that otherwise the capital worth of a man would be overestimated, that is, it would be more than the capitalized value of his income. Thus (if, to make the calculation simple, his stocks and bonds and real estate are all reckoned at a five per cent basis) it is clear that the man's total worth, in these three items is $4,000,000, at the beginning of the year and $4,150,000, at the end of the year, since he then has the same stocks and bonds yielding the same five per cent and $150,000 of real estate in addition. Now according to the capitalization principle, the $4,000,000 at the start must be the capitalized (*i.e.*, discounted) value of all the future income including that of the first year. If this principle is violated something must be wrong.[11]

Professor Fisher then attempts to prove that something is wrong by showing that the present discounted value of the income series $50,000; 207,500; 207,500; 207,500 forever, is exactly $4,000,000 and that it will *always* amount to $4,000,000 regardless of the amount saved or spent each year as long as savings are not included as income. But if savings (reinvestment in real estate) *are included* as income, the series becomes $200,000; 207,500; 207,500 . . . . forever, and the present discounted value of such a series is in excess of $4,000,000 or about $4,143,000. All this is very true and there is "no escape from such mathematical conclusions." But of what significance is this demonstration of capitalization, for income theory? I will offer to buy the stock, bonds, and real estate for $4,000,000 at the end of the first year, but will he take it? No, he will insist on $4,150,000. In other words every time a reinvestment takes place the books, under good accounting methods, must show a change in capitalization. It means nothing to show by a neat mathematical example that the present value of the

[10] *Ibid.*, p. 8.
[11] *Ibid.*, pp. 8 and 9.

income series will always be the same if savings are not called income, for this ignores completely the importance of any changes in capital value in the future on the basis of future decisions as to the disposition of the income, received; how much of each year's receipts is saved and how much spent. For example, suppose that two individuals, A and B, each have an income of $200,000 from stocks and bonds, just as Professor Fisher assumes. Suppose A reinvests $150,000 in real estate at the end of the first year, while B spends his entire receipts the first year. Assume also that at the end of the fourth year each one spends the entire principal with no reinvestment whatever. The two income series then according to Professor Fisher's definition of income (that is omit savings, but include consumption of capital) would be:

A ....=	$ 50,000	207,500	207,500	4,357,500
B ....=	$200,000	200,000	200,000	4,200,000

It is very true that the present discounted value of both these income series is $4,000,000, *but the incomes secured during the four years are, nevertheless, not the same.* The total income of A is $4,822,500 while the total for B is $4,800,000, a difference of $22,500 by Professor Fisher's own method of measuring income. Just what light is shed on income theory by proving that two different incomes *(measured by the same method)* can be capitalized at exactly the same amount? The longer the period of years and the greater the variation in proportion of earnings saved, the greater the difference in the two incomes; but the present value of the series always remains the same—$4,000,000.

The truth is that as soon as Professor Fisher brings to an end an income series and the capital sum is consumed, his method of measuring income will give, theoretically, exactly the same total as will be obtained by following the more common commodity and service definitions. If the latter is to be charged with double counting, the same charge can be made equally well against the former definition since both include the capital sum as income. Retaining the example above, if A reinvested $150,000 in real estate out of his $200,000 interest receipt the first year, and then after securing $7,500 a year on his real estate in addition to his annual $200,000, decided at the end of the fourth year to sell the real estate for $150,000 and spend rather than reinvest the funds so secured, the total income for the four years calculated by *both* definitions is exactly $822,500.

Service Definition (savings of $150,000 not counted as income during the first year but depletion of capital at the end of the fourth year counted):

$ 50,000	207,500	207,500	357,500 = 822,500

Commodity and Service Definition (savings counted as income when saved but depletion of capital charged off as depreciation and not as income at the end of the fourth year):

$200,000	207,500	207,500	207,500 = 822,500

Boiled down, the conclusion is that a definition of income that rules out savings but makes no deduction for capital depletion, will give the same total income as a definition that includes savings as income but rules out depletion of capital. The only theoretical difference is the point at which the capital sum is to be counted. It must be admitted that the possibility of keeping the capital intact over long periods and economic changes during the time interval such as fluctuations in price level, would obscure this equality, but it then becomes a matter of expediency in practice as to which is the more desirable method of measuring income. Since the service definition defies current usage and since the commodity and service definition will stand the test of scientific criticism, economists should continue to avoid the former and make use of the latter.

Experience with the Income Concept

Turning now to the second part of the article, must we agree with Professor Fisher that actual experience has forced men's minds towards the acceptance of the service definition? Professor Fisher first makes use of income tax experience; but I believe he is mistaken in his interpretation. An income tax law is not to be considered a textbook on economic theory. The only *raison d'être* rests in the need for a satisfactory source of government revenue. It is therefore a serious mistake for an economist to criticize the use of the income concept as a basis for a tax law, purely on the manner in which it fails to fit in with his particular theoretical definition of income. A tax law must be formulated with due regard for those principles which experience has taught tax experts should be followed if the tax burden is to be adjusted with equity and efficiency. An income tax must be consistent with both the theory of income and the principles of taxation, harmonizing the two viewpoints as closely as is practically possible. The term income has not specifically been defined in the tax laws, but the Supreme Court of the United States has evolved out of experience with cases brought before it, the following definition, "Income is the gain derived from capital, from labor, or from both combined, including gains accruing through the sale or conversion of capital assets."[12] This is really the commodity and service definition, with one modification, that a change in the value of a capital asset is not to be classed as income until it is realized "through sale or conversion." This limitation, while theoretically questionable, is quite justifiable as an aid in the satisfactory administration of the tax law. Failure to appreciate its significance probably accounts for Professor Fisher's belief that apparent "trends" are noticeable towards the ultimate acceptance of his own income definition.

[12] Eisner *vs.* Macomber, 252 U.S. 189.

(1) The treatment of capital gains is first in importance. "The law on the taxation of capital gain," states Professor Fisher, "has passed from 1864 to the present through three stages, namely (1) all capital gain was regarded as taxable income whether realized or not; (2) only realized capital gain that is turned into money form was so regarded; (3) even realized capital gain was recognized to be a very peculiar kind of 'income,' taxable in a different way from ordinary income."[13] These statements in general are correct. The first stage resulted in double taxation since a capital gain was taxable once as it accrued and again when realized. This defect was due to the haste in preparing the law to secure revenue for the conduct of the Civil War and was corrected in subsequent legislation.

The second stage grew out of the problem of administering the income tax law. It is a rule of taxation that taxes should be convenient in time and manner of payment, and a taxpayer is not in a convenient position to pay a tax on a capital gain until that gain is actually realized. To tax accrued but unrealized gains would put an unreasonable burden on the taxpayer. Of still greater importance is the need for making the administration of the law as simple as possible. If capital gains were taxable when they accrued it would be necessary for the tax collector to assess the value of every item of property owned by the taxpayer—real estate, stocks, bonds, etc.,—every year even though the property were not sold. A man who owned his own home would pay an additional income tax each year his home increased in value, and would have a deductible loss each year his home decreased in value. Obviously, whatever may be the argument from the theorist's viewpoint, the tax collector must wait until an accumulating capital gain is "cashed in" and then levy the tax on the difference between acquisition cost and net selling price. If, as Professor Fisher would have us believe, the courts really considered that capital gains are a questionable form of income, and restricted their definition to realized gains for that reason, then any taxpayer who sold his property but immediately reinvested the proceeds in other property—just making a switch in security holdings, for example—should be exempt from a tax on the secured gain since the value of his holdings remained unaltered by the reinvestment. But the courts have been very clear on this point and rigidly enforce a tax on the realized gain, regardless of reinvestment. This is why Professor Fisher, while claiming a trend towards his definition of income (that is not counting accrued capital gains—a form of saving—income), is forced to admit that the courts did not go far enough in his direction. He concludes by stating that "the present method of assessing taxes on capital gains is illogical and un-

[13] *The Income Concept in the Light of Experience, op. cit.,* pp. 18-19.

just." The courts have not been illogical; they simply were not working under the service definition of income.

The third stage, the taxing of capital gains at a lower rate than "other income" under the present tax laws, is of no significance in shedding light on the definition of income; it is an example of special interests having the power to favor themselves in a tax law. The "lower rate" is really lower only to persons of very large incomes—incomes taxable at more than 12½ per cent. As a matter of fact, earned incomes are taxed at a lower rate than unearned, but would Professor Fisher be willing to say this lower rate indicated that earned income (wages primarily) is not the same as "ordinary" income? Taxation expedience, not income theory, is the basis for such distinctions.

(2) The Supreme Court has declared that stock dividends are not income and this is also interpreted by Professor Fisher as a trend towards his definition since it would appear that corporate surplus accumulations distributed as stock dividends are a form of savings and in effect the Supreme Court has declared this particular form of saving not income. This interpretation is very questionable. As we have pointed out above, the essence of the concept of income as used by the Supreme Court is that a *gain* must be realized, a gain separate and distinct from its source, or origin. The appreciation in value of a house is not taxable income until the house is sold. An increase in the value of a share of stock is not taxable income until the stock is disposed of. Wages due are not taxable income until they are paid. The reason for the courts' decision was that "a stock dividend really takes nothing from the property of the corporation and adds nothing to that of the shareholder, but that the antecedent accumulation of profits evidenced thereby, while indicating that the shareholder is the richer because of an increase of his capital, at the same time shows he has not *realized* or received any income in the transaction."[14] The Supreme Court stated clearly that in its opinion a gain was not realized by the receipt of a stock dividend. The proof that Professor Fisher's interpretation is incorrect rests on the fact that subsequent decisions of the Supreme Court declared that if the stock dividend were disposed of by the taxpayer subsequently and a gain realized, over and above the original value of the investment, that gain was taxable as income. The Supreme Court was not exempting a form of saving, it was waiting until the time when a realized gain appeared. Further proof of this line of reasoning is the declaration of the Court that dividends in bonds or in the stock of other subsidiary corporations, were taxable as income. Professor Fisher here again sees the Court inconsistent, but the Court was merely

[14] Eisner *vs.* Macomber, *op. cit.*, p. 210. Italics are mine.

recognizing that such distributions ***do make the corporation poorer***; separation of assets had taken place.

Finally, turning to the work of the National Bureau of Economic Research, Professor Fisher finds that the Bureau, in its later studies, has "felt compelled to add a new brand of income called 'current income.' "[15] Current income is defined by the Bureau as total income less gains or losses in the value of property owned. To Professor Fisher this appears to indicate a tendency towards his definition since one form of savings, property value appreciation, is ruled out for separate consideration. Now if the Bureau separated out *all* forms of savings and divided total income into current income on the one hand and savings of all forms on the other, this would indicate a recognition of Professor Fisher's concept and current income would be the same thing as his own concept. The separation of property value appreciation only, however, indicates this cannot be the true interpretation of the action of the Bureau. The real reasons behind the Bureau's action were two: (1) the statistical measurement of property value appreciation cannot be made as accurate as the rest of the income data; and (2) individuals in keeping their books treat this form of gain in so many different ways that no method of treatment could be adopted by the Bureau that would not give artificial-seeming results.

In conclusion, Professor Fisher's very interesting article neither destroys the value of the commodity and service definition nor proves a trend towards the ultimate acceptance of the service definition of income as a result of practical experience. There is little to commend such a radical change in our established and customary economic terminology.

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[15] *The Income Concept in the Light of Experience, op. cit.*, pp. 26-27.

FISCAL ASPECTS OF THE STATE INCOME TAX SINCE 1918

In 1920 there appeared in the AMERICAN ECONOMIC REVIEW two articles which reviewed the progress made in state income taxation during the period 1911-1918.[1] Since that year no studies have been published specifically treating of developments in this field throughout the last ten years.[2] In view of the widespread interest in state tax reform, in which the state income tax plays an important part, these two studies should be brought down to date. The purpose of the following discussion is primarily to evaluate results from a fiscal viewpoint.

In 1918 there were income tax laws, either individual, corporation, or both, in force in nine states; today such laws are effective in sixteen: Arkansas, California, Connecticut, Delaware, Massachusetts, Mississippi, Missouri, Montana, New Hampshire, New York, North Carolina, North Dakota, Oklahoma, South Carolina, Virginia, and Wisconsin.[3] Of these sixteen states, Arkansas, California, New Hampshire, North Dakota, and South Carolina have adopted the income tax since 1918. It is to be noted that only five of the sixteen states were taxing incomes at the outbreak of the war, and that six began to tax incomes during the war period.

Four other states, Alabama, New Mexico, Pennsylvania, and Oregon have had income tax laws in force since 1918 which are not now in effect.[4] The Supreme Court of Alabama in 1920 held that the Alabama income tax was a property tax, and hence violated the uniformity clause of the state constitution. About $25,000 was collected under the law while it was in force.[5] The New Mexico statute was repealed by the state legislature in 1920; the Pennsylvania tax was only an emergency measure for 1923-24; and the Oregon law was repealed by popular vote in 1924.[6] New Mexico's law was unproductive and very defective

[1] Alzada Comstock, "Fiscal Aspects of State Income Taxes," AMERICAN ECONOMIC REVIEW, vol. X, pp. 259-271; H. L. Lutz, "The Progress of State Income Taxation since 1911," *ibid.*, pp. 66-91.

[2] In 1926 the Bureau of Business Research of Indiana University published a study, *State Income Taxation*, embracing, among other things, the fiscal aspects. No attempt was made, however, to cover the entire period since 1918.

[3] Arkansas has adopted a net income tax as this article goes to press. This is Arkansas' second attempt at income taxation. The first law, a gross income tax measure, was held unconstitutional in 1925, on the ground that it taxed "natural" occupations. Only $147,000 was collected under the law. California is reported to have adopted a 4 per cent corporation net income tax in November, 1928. National Tax Association *Bulletin*, January, 1929, p. 99.

[4] National Tax Association *Bulletin*, 1918-1928, *passim*; *Proceedings of the National Conferences, 1918-1928, passim.*

[5] Alabama, Letter from the Tax Commission.

[6] A number of states, during the last ten years, have adopted constitutional amendments relating to the income tax. Louisiana in 1921 and Nebraska in 1920

in its administrative provisions, and it appears that the Oregon measure was unfairly attacked. The principal argument used against the latter was that it drove capital from the state; but no evidence on this point was presented.

The efficacy of the state income tax as a revenue producer may be judged roughly by surveying the federal income tax returns from states employing the income tax, by viewing the entire fiscal systems of the states in question, and by an analysis of the costs of administering the state income taxes. The receipts from the latter may be compared with the collections under the federal law, with the total state tax receipts, and with the revenue derived from the general property tax. Obviously, of course, other comparisons could be made, but these will indicate something of the progress which has been made by the states in taxing incomes, will throw some light on the relative productivity of the state income tax, and will provide a basis for comparing the revenue raising powers of the laws of the various states. Excepting Arkansas and California, the laws of the states which now tax incomes have been in force long enough to make possible the drawing of reasonably valid conclusions on these points.

Needless to say, caution is necessary in utilizing the available data. Information covering a period of years must necessarily be gathered from a number of distinct sources. The result is that data are not strictly comparable, and are in some cases incomplete. Statistics published by the state tax commissions, state auditors or treasurers, and by the federal government seldom check exactly. In order to obtain final figures, which are not available in certain of the reports, computations from component items are necessary, and it is impossible always to be sure that the correct items have been included or excluded. The laborious and uncertain process of letter writing is obligatory in many cases.

In comparing the revenue produced by the state income taxes with the revenue derived under the federal income tax laws, in the case of Connecticut and Montana, the federal receipts taken were those relating

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adopted amendments allowing the imposition of such a tax. Colorado in 1922, Indiana in 1926, Michigan in 1924, and Minnesota in 1920 defeated similar amendments. Florida in 1924, in an effort to attract capital, adopted an amendment prohibiting the enactment of income and inheritance tax laws.

Much legislative interest has been manifested in still other states. At present (December, 1928), because of the pressure for more revenue and because of the difficulties in laying hold of intangible property, not a little sentiment favoring the enactment of a state income tax is reported in Colorado, Idaho, Kansas, Louisiana, Minnesota, Ohio, Oregon, Texas, and Utah. (See letters from the tax commissioners.) In addition to the urgings of certain of the regular tax commissioners, several special tax commissions which have been appointed since 1922 have recommended this method of reaching those who contribute least to their state's expenditures.

only to the tax on corporations inasmuch as the state income tax in these two states applies only to corporations.[7] For an analogous reason the federal receipts for Delaware, New Hampshire, and Oklahoma were those collected only from individuals. In the case of New York the federal income tax collections from individuals were not included until 1920, the year in which the state income tax on individuals was first effective. The figures for the other states include revenue both from corporations and from individuals. New Hampshire first collected an income tax in 1924, North Dakota in 1920, and South Carolina in 1922; receipts for the other states, except North Carolina, run throughout the period. The North Carolina figures begin in 1922 when the state government first began to derive revenue from the income tax.

In comparing the state income tax collections with the total state tax receipts and with the receipts from the general property tax, only the actual revenue available for the state government was used. Massachusetts and New Hampshire kept no income taxes for the state treasury, and New York and Wisconsin divided with the localities. For these states comparisons were made, therefore, with local tax receipts or with both local and state tax receipts. The Delaware government received nothing from the general property tax until 1921, and the state of North Carolina, during the entire period, received no revenue from *ad valorem* taxes. Information as to costs of collection is available for but eight of the states.

Table I shows that the states as a whole, during the period 1918-1927, have increased their income tax revenue relative to the federal income tax receipts, from a little over 15 per cent to almost 20 per cent. In general they have collected about one-sixth as much as the federal government. This, however, does not necessarily indicate greater efficiency on the part of the states, but merely that they are collecting a relatively greater proportion of total income taxes. How far can they go in this direction without seriously impairing the productivity of the federal laws? The data also seem to show that state income taxes as a whole are less elastic than the federal income tax, probably because the states tap lower income levels and are less dependent upon corporation earnings. The falling off in revenue in 1922 was less marked in the case of the states, even after allowing for changes in the law.

The most striking facts, however, brought out by the table relate

[7] The federal statistics are based on the taxpayers' returns as received, as shown in *Statistics of Income*, Treasury Department. In order to make them comparable with the state receipts, the figures as shown in the federal report for a given year are dropped down to the succeeding year. The state receipts for a given year relate to the preceding year's income.

TABLE I

SELECTED FEDERAL AND STATE TAX RECEIPTS FOR FOURTEEN STATES, 1918–1927[1]
(Thousands of dollars)

Year	State income (1)	Federal income (2)	State income available to state (3)	Total state (4)	General property (5)	Percentages		
						(1) to (2)	(3) to (4)	(3) to (5)
1918	40,334	267,020	15,745	124,649	34,572	15.1	12.6	45.1
1919	47,829	405,450	19,522	132,542	36,215	11.7	14.7	53.8
1920	108,009	864,908	55,987	212,707	67,429	12.5	26.3	83.0
1921	110,568	666,152	60,408	217,620	57,770	16.5	27.6	104.0
1922	98,159	456,060	51,305	220,913	61,197	21.4	23.2	83.5
1923	91,875	698,504	47,626	251,855	71,051	13.1	18.8	67.0
1924	99,177	661,985	47,714	259,737	63,536	14.9	18.3	75.1
1925	114,671	677,214	54,392	312,273	67,759	16.9	17.4	80.1
1926	136,092	805,250	63,899	339,234	63,583	16.8	18.8	100.0
1927	162,827	841,834	88,758	383,388	57,229	19.3	23.1	155.0
Total	1,009,541	6,344,377	505,356	2,454,918	580,341	15.7	20.6	87.1

[1] State income tax receipts were taken from reports of state tax commissions, state auditors, or state treasurers; federal income tax receipts from *Statistics of Income for 1926*, Treasury Department; and total state and general property tax receipts from *Financial Statistics of States, 1918–1919, 1922–1926*, except where state reports were very clear and complete. Data on total state and general property tax receipts for 1920, 1921, and 1927 were taken from the same sources as state income tax receipts, complete federal figures for these years not being available. In some cases data from state authorities are not published.

to the total tax receipts of the states and to the general property tax. The state income tax has risen from a place of minor importance for the fourteen states as a whole to one of major importance, having supplied one-eighth of the total state tax revenue in 1918, and well over one-fifth in 1927. In some of the states, as will be shown, the state income tax is today by far the most productive single source of state revenue; in others it is outstripped only by gasoline and automobile taxes. It can no longer be said that the general property tax is the pillar of the fiscal systems of the states which now tax incomes. In 1918 the state income taxes produced less than one-half as much as the general property tax; in 1927 more than one and one-half times as much. For the ten years, the state income tax revenue was equal to nearly nine-tenths of the property tax receipts. In some states the income tax, together with other special taxes, has completely replaced the general property tax as a source of state revenue. All this has not been due to the actual decline of the property tax, but to the increasing productiveness of the state income tax. General property tax receipts increased 65 per cent; income tax receipts 217 per cent. There has been, however, a decline in revenue from the general property tax since 1925.

Data on costs of administration are incomplete and scattered, but such information as is procurable indicates a slight decline during the

period. The average cost of administration—the ratio of the total cost of assessing and collecting the state income taxes to total collections—in New Hampshire (1924), New York (1920), Massachusetts (1918), Mississippi (1925), and Wisconsin (1916) was 2.5 per cent. The corresponding figure for 1927 was 2.03 per cent. Less complete data for North Carolina and North Dakota also show a decline. Although the expenses of administration do not, of course, adequately show the cost of the income tax, nevertheless they do throw light upon the efficiency of the various states in administering the income tax and upon the desirability of utilizing this tax as a part of the state fiscal system. An administration cost of 2 per cent is not excessive, and compares favorably with the cost of administering other taxes.

The financial results of the operation of the state income tax during the ten years in the separate states show considerable diversity. While most of the states have made progress, others have not. Some of the state laws produce a considerable revenue, while others produce very little, partly because of the acts themselves. Table II shows the receipts from the income tax for each of the states, throughout the ten years. Table III brings out the relative rankings of the states at the beginning of the period, in 1927, and for the period as a whole.

TABLE II

STATE INCOME TAX RECEIPTS FOR FOURTEEN STATES, 1918–1927
(Tens of thousands of dollars)

State	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	Ten years
Connecticut...	325	260	180	294	193	86	216	263	200	259	2,276
Delaware.....	40	32	30	30	39	54	67	103	144	160	699
Massachusetts	1,496	1,577	1,760	1,509	1,329	1,462	1,711	1,695	2,195	2,024	16,758
Mississippi...	5	7	9	4	5	3	9	82	215	186	525
Missouri.....	20	48	328	479	257	287	334	361	434	403	2,951
Montana.....	56	39	24	20	10	20	21	27	30	25	272
New Hampshire.......							21	42	45	51	159
New York....	1,368	1,979	6,684	7,778	6,348	5,942	5,697	7,243	7,928	10,064	61,031
North Carolina					223	357	448	375	608	634	2,645
North Dakota.			9	44	37	17	38	43	64	46	298
Oklahoma....	42	51	82	92	40	30	19	32	34	36	458
South Carolina					104	203	226	133	156	176	998
Virginia......	66	91	181	210	222	115	154	175	175	342	1,731
Wisconsin....	616	700	1,514	598	1,008	610	957	892	1,382	1,878	10,155
Total	4,034	4,784	10,801	11,058	9,815	9,186	9,918	11,466	13,610	16,284	100,956

Connecticut. The Connecticut law has produced an average annual revenue of $2,275,000.[8] Because of the unusually large corporation earnings of 1917, the 1918 collections ran well over $3,000,000. At

[8] *Financial Statistics of States*, 1918, p. 34; also Connecticut, *Abstract from the Treasurer's Report*, 1928.

TABLE III

RELATIONSHIP IN PERCENTAGES OF SELECTED FEDERAL AND STATE TAX RECEIPTS FOR FOURTEEN STATES, 1918, 1927, AND 1918–1927

State	1918			1927			1918–1927		
	State income to federal income	State income available for state to total state	State income available for state to general property	State income to federal income	State income available for state to total state	State income available for state to general property	State income to federal income	State income available for state to total state	State income available for state to general property
Connecticut....	40.5	22.4	112.0	16.5	10.7	114.3	20.1	12.5	111.1
Delaware......	4.2	36.1	68.4[2]	31.2	30.5	255.0	17.0	18.4	178.0
Massachusetts..	17.2			23.6			17.1		
Mississippi....	1.7	1.0	2.5	89.7	18.6	43.0	15.7	6.5	10.5
Missouri......	.7	2.6	5.0	8.4	12.2	80.5	7.6	15.6	60.4
Montana......	36.2	6.8	40.5	16.1	5.6	15.4	22.9	7.6	15.2
New Hampshire	12.6[4]			42.0			29.2		
New York.....	12.9	13.5	72.1	16.5	31.0	245.0	14.9	26.7	114.7
North Carolina.	24.3[3]	32.3[3]		38.4	24.6		29.8	25.1	
North Dakota..	47.5[1]	1.8[1]	2.8[1]	75.5	5.6	11.5	40.3	5.9	9.6
Oklahoma.....	7.4	5.9	13.2	4.4	1.3	16.0	6.3	3.6	13.6
South Carolina.	43.1[5]	14.8[5]	21.0[5]	83.5	12.5	58.7	55.0	15.2	50.0
Virginia.......	6.1	7.8	18.5	16.4	12.8	60.4	11.4	9.4	30.6
Wisconsin.....	48.4	7.5	12.8	59.3	42.0	125.0	45.5	28.2	60.3

[1] 1920 [2] 1921 [3] 1922 [4] 1924 [5] 1922

that time, as Table III shows, Connecticut ranked fourth from the top in the percentage of state income tax receipts to federal income tax receipts, while in 1927 she ranked ninth. In the comparison of state income tax receipts to total property tax receipts she stood near the top for both years and for the period as a whole, but closer to the bottom in 1927 and for the period as a whole in the ratio of income tax receipts to total state tax receipts.

These results reflect the limited nature of the Connecticut law and the relative unimportance of the property tax in that state. At present, as in 1918, the income tax is levied by the Tax Commission only upon the net income of corporations not otherwise taxed—all except banks, insurance and trust companies, and public utilities. Taxable income is that derived within the state and upon which the company is required to pay the federal income tax.[9] The 2 per cent rate of 1918 has, however, been changed to 3 per cent. The property tax receipts for 1927 were a little over $1,800,000,[10] and amounted to less than one-thirteenth of the total state tax collections.

[9] Connecticut, Laws of 1915, ch. 292; Acts of 1921, ch. 382.

[10] *Ibid., Abstract from the Treasurer's Report,* 1928. Connecticut does not have a general property tax, but the state property tax receipts are derived from an investments tax, and from the state tax on towns, which in last analysis comes mainly from *ad valorem* taxes.

Delaware. The Delaware law in 1918 brought in a revenue of only $395,000, a small amount when related to the federal income tax receipts from that state; but in 1927 over $1,597,000, nearly one-third as much as the federal law.[11] The receipts from the state income tax have not increased as fast, however, as the total state tax receipts, but, as compared to the receipts from the general property tax, the increase has been striking. In this latter respect, Delaware stood third from the top in 1918 and at the head of the list in 1927, a rank partly arising from the low yield of the property tax which amounted to about half a million dollars per year.[12]

The increase in Delaware's income tax receipts in 1927 over 1918 was due in large part to three important changes in the state income tax law. In 1918 income from agricultural operations was exempt;[13] this incongruity was removed in 1919. Furthermore, at the beginning of the period the rate was but 1 per cent; in 1921 graduated rates ranging from 1 to 3 per cent were substituted.[14] The exemptions, however, were raised from $1,000 for all taxpayers to $1,000 for single persons and $2,000 for married persons.[15] The third significant change related to administration. This duty was taken from the State Treasurer and placed in the hands of the School Tax Commissioner, who was appointed by the governor and given broad administrative powers, including the right to audit returns carefully. The effect of these changes was reflected in 1925 when the income tax receipts jumped from $666,000 to $1,035,000.[16] Delaware's experience in handling capital gains and losses has, however, not been happy. The Commissioner stated in 1926 that the existing law was "quite deficient in dealing with the determination of profits or losses resulting from the sale or exchange of property."[17]

Massachusetts. Massachusetts maintained a high rank throughout the period, collecting in income taxes nearly $15,000,000 in 1918 and over $20,000,000 in 1927.[18] The ratio of these receipts to federal income tax receipts increased; and, although the income tax revenue was distributed to the localities, yet had the state retained the revenue it would have amounted to at least half of the total state tax receipts

[11] Delaware, *Report of the State Treasurer*, 1918, p. 26; *Report of the School Tax Commissioner*, 1927, p. 10.

[12] Delaware, *Annual Report of the State Treasurer*, 1921, p. 20; 1927, p. 29; also *Financial Statistics of States*, 1922-1926.

[13] *Ibid.*, Laws of 1917, chs. 26 and 30; 1919, ch. 30.

[14] *Ibid.*, 1921, ch. 9.

[15] In 1927 the Commissioner recommended that the $2,000 exemption be reduced. Delaware, *Report of the School Tax Commissioner*, 1927, p. 13.

[16] *Op. cit.*, *Report of the School Tax Commissioner*, 1927, p. 10.

[17] *Ibid.*, 1926, p. 2.

[18] Massachusetts, *Report of the Commissioner of Corporations and Taxation*, 1927, p. 107.

and to almost twice as much as the revenue from the general property tax. When distributed to the localities, the income taxes amounted in 1927 to over 10 per cent of the total taxes assessed upon real and personal property and upon polls for local purposes.[19] The success of the Massachusetts law has been attributed largely to the centralized and specialized administrative machinery. Her costs of administration have been below the average, and her audits and reassessments in 1927 produced over $619,000 in revenue, an amount more than equal to the whole cost of administration—$486,000.[20]

Although the annual flow of wealth in Massachusetts is large, yet it should be remembered, in comparing her income tax receipts with those of states like Wisconsin and New York, that the Massachusetts tax has never been a general income tax. It is levied upon incomes from certain intangibles; upon incomes from annuities, professions, employments, and trade and business; upon the excess of gains over losses received from purchases or sales of intangible personal property; and upon domestic and foreign business corporations, except such corporations as commercial banks, savings banks, and insurance companies, which are taxed separately.[21] Obviously this leaves out incomes from real estate, bank deposits, and many corporations. The personal exemptions of $1,000 for single persons and $1,500 for married persons, and the rates of 6 per cent upon incomes from taxable intangibles, 1.5 per cent upon incomes from annuities and professions, 3 per cent upon gains from purchases or sales of intangibles, and of 2.5 per cent upon corporate incomes are comparable to those of other states.

Mississippi. Of all the states considered, Mississippi has made the greatest relative progress. In 1918, as judged by the federal returns, her income tax was next to the poorest and produced less than $52,000, an amount equal to but 1 per cent of the total state taxes and to only 2.5 per cent of the general property tax—the smallest percentages of any state. The state income tax was hardly worth having; at no time prior to 1924 did it produce annually more than $89,000.[22] By 1927 Mississippi was collecting in income taxes almost 90 per cent as much as the federal government; was securing nearly one-fifth of her total tax receipts from the income tax; and was receiving over 40 per cent as much from the income tax as from the general property tax. In that

[19] *Ibid.*, p. 115. The Commissioner stated in 1926 that local taxation of real estate and tangible personal property had a net benefit to the extent of $90,000,000 during the past decade, since property taxes under the law existing in 1916 would not have produced over $70,000,000.

[20] *Op. cit.*

[21] *Ibid.*, *General Laws relating to Taxation and Special Assessments*, 1927, chs. 62 and 63.

[22] Mississippi, *Report of the State Tax Commission*, 1924, p. 197; 1925, p. 183. See also letter from the State Tax Commission.

year the income tax produced $1,864,000;[23] yet Mississippi, predominantly agricultural, was generally regarded as one of the backward states in matters of state finance!

The change was undoubtedly due to the new income tax law of 1924. The next year her income tax receipts jumped from $89,000 to $820,000, and increased to $2,000,000 in 1926.[24] The law of 1912 had provided for a tax of .5 per cent upon incomes in excess of $2,500; allowed an offset for *ad valorem* taxes; and placed the assessment and collection in the hands of local officials.[25] The senate and house committee which reported in 1918 recommended outright repeal of the law. Nothing was done, however, until 1924. In that year a law was passed placing a tax upon the entire net income, whether received from sources within or without the state, of every resident individual, corporation, or association, and upon the entire net income from property owned, business, or occupation carried on in the state by nonresidents.[26] The tax is in addition to all other taxes. The law follows rather closely the federal law in the definition of net income; allows personal exemptions of $1,000 for single persons and $2,000 for married persons; and specifies graduated rates for both individuals and corporations, ranging from 1 per cent on the first $1,000 of taxable income to five per cent on all taxable income in excess of $25,000. Every individual having a gross income of $5,000 or more is required to file a return; and corporations must file returns, regardless of the amount of their income. The law is administered by the chairman of the State Tax Commission, at a cost of less than 2.5 per cent.[27] In 1926 the amount of additional taxes collected by auditing returns was ten times the entire appropriation made for administering the income tax law.[28] The success of the new law is evinced in the statement by the Tax Commission in 1925 that "the income tax law promises greater relief in solving the problem of taxation within this state than any other law which can be written. . . . ."[29] No state shows more clearly than Mississippi what can be realized from a carefully drawn, well administered law. It is obvious, of course, that there are theoretical defects in the Mississippi law; for example the graduated rates on corporations.

Missouri. Missouri stands in direct contrast to Mississippi. Except in relation to the general property tax, her income tax receipts

[23] *Ibid.*, 1926, p. 180.
[24] *Ibid.*, 1924, p. 197; 1925, p. 183.
[25] *Ibid.*, Laws, 1912, ch. 101; 1914, ch. 116.
[26] Mississippi, *Income Tax Law of 1924*, pp. 4, 5.
[27] *Ibid.*, *Report of the State Tax Commission*, 1927, p. 203.
[28] *Ibid.*, 1926, p. 182.
[29] *Ibid.*, 1924, p. 218.

compare unfavorably; and since she receives only about $5,000,000 per year from the property tax her showing is really poor in this respect.[30] Missouri's stream of taxable income is exceeded by only two of the fourteen states, Massachusetts and New York, and yet her collections of $4,000,000 in 1927 from the income tax constituted a smaller percentage of the federal receipts than did those of any state except Oklahoma. At the beginning of the period the yield was negligible, being less than $202,000.[31]

The explanation of these relatively low yields lies in the state law. In 1918 the rate was the very moderate one of .5 per cent on both individual and corporate income; the exemptions followed the federal law of 1916; and the assessment was made as for personal property by local officials.[32] All taxes except special assessments were deductible. In 1919 the rate was raised to 1.5 per cent, and the result was immediately reflected in the receipts which increased from $485,000 in 1919 to $3,278,000 in 1920.[33] The rate was later reduced, however, to 1 per cent, and the exemptions and the administration of the law were allowed to remain as they were in the beginning. Clearly, an income tax on this modest scale has been inadequate for the financial needs of a state like Missouri. It is hardly to be expected that a law imposing so low a rate, lacking the feature of graduation, and providing for no separate, specialized administration will play an important part in the revenue system of the state.

Montana. Montana received less from her income tax at the end of the period than at the beginning. This was of course partly due to the high yield during the war years; but even during the last five years the receipts have shown little tendency to increase, averaging about $270,000 per year.[34] In 1927 the collections amounted to but $245,000, and only one state, Oklahoma, realized from the income tax a smaller percentage of its total state tax revenue.[35] The Montana receipts were relatively high, however, as compared to the federal income tax receipts, but it is to be noted that the total amount collected by the federal government in 1927 was but $1,500,000.

The low yield in this state is probably due principally to the undeveloped condition of Montana and to the limited scope of her law. Only certain corporations are taxed, and the rate is flat at 1 per cent.[36] In addition, there is an exemption of $2,500 to each corporation. The

[30] Missouri, Special statement by the State Auditor.
[31] *Op. cit.*
[32] *Ibid.*, Laws of 1917, p. 524.
[33] *Ibid.*, Special statement by the State Auditor.
[34] Montana, *Report of the State Board of Equalization*, 1924-26, p. 38.
[35] *Ibid.*, Letter from State Accountant.
[36] *Ibid.*, Laws of 1917, ch. 79; 1919, ch. 69; Revised Codes, 1921, ch. 179.

law was originally administered by the State Treasurer, but was later placed under the supervision of the State Board of Equalization.

New Hampshire. The New Hampshire law, first effective in 1924, produced in that year $209,000; in 1927 slightly over $506,000, all of which was distributed to the localities.[37] This constituted a little over 2 per cent of the total local tax revenue. If kept by the state, it would have amounted to less than 10 per cent of the total state tax receipts.

The income tax in New Hampshire is, of course, limited in scope, having been designed only to reach intangible property. It is levied upon incomes from intangibles, except from savings bank deposits, building and loan associations, and state and local bonds on New Hampshire; and upon incomes from dividends on shares in New Hampshire state banks, trust companies, and national banks.[38] There is a flat exemption of $200 for every taxpayer, and the rate is the average rate upon other property throughout the state.

While the yield of the tax has been low, the State Tax Commission, the administrator of the law, states that the income tax "is far more satisfactory than our way of taxing intangibles themselves. For the last year intangibles were taxed locally, the yield in the state was but $187,000. We are making a constant gain and we shall collect in the neighborhood of $625,000 in 1928 at a cost of 2 per cent."[39] This constant gain is indicated by the fact that the income tax receipts increased over 100 per cent from 1924 to 1927, while total state tax receipts increased less than 15 per cent. The rate of increase was also considerably greater than the rate of increase in local taxes.

New York. New York, due to the huge amounts of income derived within her borders, is the only state, except Massachusetts and Wisconsin, that collected in 1927 more from the income tax than from any other state tax. Accordingly, she ranks high as compared to the rest of the states. The total collections amounted in 1927, for the first time, to more than $100,000,000—seven times the receipts in 1918. Of this sum, $57,000,000 was kept for the state's own use, and $43,000,000 was distributed to the localities.[40] Local distributions constituted about 6 per cent of the total available local tax receipts. The state's share amounted to almost one-third of her total tax revenue, and to about two and one-half times her receipts from the general property tax.

This huge increase has occurred partly because of the changes made

[37] New Hampshire, *Report of the State Tax Commission*, 1927, p. 20.
[38] *Ibid.*, Laws of 1923, ch. 65.
[39] *Ibid.*, Letter from the State Tax Commission.
[40] New York, Letter from the State Tax Commission; also *Report of the State Tax Commission*, 1926, p. 187.

in the New York law during the period. The law has been broadened in scope and the rates have been raised. The increase in income tax receipts in 1920 from $20,000,000 to $67,000,000 can be largely explained in this manner. The statute of 1917 had applied only to miscellaneous mercantile and manufacturing corporations, replacing the older franchise tax on the capital stock of such companies.[41] In 1919 the rate for corporations was raised from 3 per cent to 4.5 per cent, and a personal income tax law was enacted.[42] The latter applied, as at present, to the net income of residents, and of non-residents earned within the state. From the beginning the rates have been low, ranging from 1 per cent on the first $10,000 to 3 per cent on all in excess of $50,000. During the period 1924-1926 the rates were lowered to three-fourths of the 1919 rates, but the original rates were restored in 1926. The exemptions, however, have been above the average. During the first four years they were $1,000 for single persons and $2,000 for married persons; in the fifth year $1,000 and $2,500; and in the seventh year, or at present, $1,500 and $3,500. Returns are required of all who receive gross incomes in excess of $5,000. Both information at the source and payment at the source at the regular graduated rates are also required.[43]

Apart, however, from these changes in rates and exemptions, from the natural increase in income, and from cyclical influences, the increases in receipts since 1924 have been due to the fact that the lapse of time has lessened the scope for employing various expedients to reduce the taxable income, *i.e.*, the transformation of taxable income into non-taxable income, and the realization of fictitious losses. To quote the Commission:

> Down to the latter part of the year 1924, the yield of the tax had unquestionably been depressed through these expedients. Subsequent to that year, in the case of securities, there has undoubtedly been a reaction which has considerably increased the yield of the income tax over what it would have been if its yield in prior years had not been depressed. During the earlier years securities were sold and repurchased when that could be done so as to realize deductible losses. Prior to 1924 the possibilities along this line must have been nearly exhausted. But since 1924, in addition to the profit on all securities which had not been thus exchanged, there was in addition the profit on a great mass of securities which had been sold in these prior years, and then repurchased at the then depressed market value.[44]

The cost of collecting the income tax in New York has been reduced from 2.69 per cent in 1920 to 1.89 per cent in 1926.[45] High efficiency

[41] *Ibid.*, Laws of 1917, ch. 726.
[42] *Ibid.*, Laws of 1919, ch. 627.
[43] New York, Personal Income Tax Law, Section 366.
[44] *Ibid.*, *Report of the State Tax Commission*, 1926, p. 61.
[45] *Ibid.*, p. 187.

in administration has also been indicated by the careful audit of returns, which produced in 1920 about $250,000 and in 1925 more than $2,000,000. The benefits from auditing are greater than the figures indicate, because the knowledge on the part of the taxpayer that his return will be carefully audited prevents many from trying to evade the tax.

North Carolina. The North Carolina law produced in the first year of its operation, 1922, a little over $2,000,000; in 1927 over $6,000,000.[46] Only Massachusetts, New York, and Wisconsin derive a greater revenue from the income tax. As a result, North Carolina ranks sixth from the top in comparing the state income tax collections with the federal collections and fourth from the top in comparing the state income tax receipts with the total state tax receipts. She receives no revenue from the general property tax, relying entirely upon special taxes; in 1921 all *ad valorem* taxes for state purposes were eliminated. The percentage of total state tax receipts derived from the income tax has declined, however, as will be noticed, from 32.3 per cent in 1922 to 24.6 per cent in 1927. This is to be explained by the tremendous increase in receipts from gasoline taxes and from automobile license taxes.

As originally passed, the North Carolina law provided for graduated rates for individuals, ranging from 1 per cent to 3 per cent, and for a flat 3 per cent rate on corporation income.[47] The present rates are much higher, ranging for individuals from 1.25 per cent to 5 per cent. The rate on corporations has been increased to 4.5 per cent.[48] In the definition of income, the law follows closely the federal law; and provides for personal exemptions of $1,000 for single persons and $2,000 for married persons. Apparently, from one point of view, the administration of the law by the Commissioner of Revenue has been efficient, inasmuch as the cost of administration for 1927 was barely 1 per cent.[49] The Commissioner stated in 1928 that the state income tax was the most satisfactory tax on the statute books.

North Dakota. The North Dakota income tax, first effective in 1920, has not produced much revenue. With one or two exceptions, collections have ranged around half a million dollars per year.[50] This low yield is due for the most part to the small amount of taxable income received by North Dakota citizens, for the state collections amount to three-fourths of the federal receipts. The latter were less than $602,000 in 1927. The law, however, as originally passed was defective. It drew

[46] North Carolina data supplied by the Commissioner of Revenue.

[47] *Ibid.*, Laws of 1921, ch. 34.

[48] *Ibid.*, Revenue and Machinery Acts, 1927, Article IV. The State Constitution sets a rate limit of 6 per cent.

[49] *Ibid.*, Letter from the Tax Commission.

[50] North Dakota, *Report of the Tax Commissioner*, 1923-24, p. 98; 1925-26, pp. 58, 69; also information sheet.

an illogical distinction between earned and unearned incomes, and provided for an elaborate system of graduated rates on both classes which reached the unprecedented height of 10 per cent upon unearned incomes in excess of $30,000.[51] For corporations there was a flat rate of 3 per cent, with a 5 per cent rate on undistributed profits remaining 6 months after the end of each calendar year, and a 10 per cent rate on profits unduly withheld. Greater emphasis than in any other state was placed upon collection at the source. These provisions were difficult to administer, and, despite an administrative system similar to that of Massachusetts, the high rates failed to produce an adequate revenue. Apparently the attempt to reach undistributed profits did not succeed any better.

As a result, the entire act was revamped in 1923. The present law, which was adopted at that time, is copied very much after the Model Law which was drawn up by the National Tax Association.[52] It applies to both individuals and corporations; the rates range from 1 to 6 per cent for individuals, with a flat rate of 3 per cent for corporations; individual exemptions are $1,000 for single persons and $2,000 for married persons; and the law is administered by the Tax Commission. Reports are that it is proving very successful.[53] Administration costs are only about $11,000 per year, and the Commissioner stated in 1928 that with a few minor changes the law would be nearly perfect. Although in the aggregate the comparative yield is not great, yet considering the small annual stream of wealth in North Dakota and the agricultural conditions in the state, the new law has not been a failure. In the first year of its operation the receipts more than doubled. It is not to be expected, under present conditions, that huge amounts will be derived from the law; but, in the words of the Commissioner, "it answers quite well the purpose of raising revenue from those who pay the least towards the support of their government."

Oklahoma. Among all the states, Oklahoma seems to be the only one of which it can be said that the state income tax has been an almost unqualified failure. Her law was actually producing less at the end of the period than at the beginning, and has provided a revenue of less than $400,000 per year.[54] This is true in the face of the fact that in 1927 the federal government collected in personal income taxes in Oklahoma more than $8,000,000. The state derives from the income tax less than 2 per cent of its tax revenue, and therefore ranks at the bottom of the list. It is obvious that the taxable income of Oklahoma has scarcely been tapped.

[51] North Dakota, Laws of 1919, ch. 224.
[52] *Ibid.,* Income Tax Law, 1923, Articles III, VI, XII.
[53] *Ibid.,* Letter from the Tax Commission.
[54] Oklahoma, Biennial Report of the State Auditor, 1928, p. 23.

The law remains substantially as it was in 1915. It does not apply to corporations, but only to the entire net income of residents and to the net income of non-residents derived within the state.[55] The rates are very mild, ranging from .75 per cent on the first $10,000 to 2 per cent on all in excess of $25,000. The exemptions are too high, being $3,000 for single persons and $4,000 for married persons, plus $300 for each child under 18 and $200 for each additional dependent person, or $500 for such dependent while he is engaged solely in acquiring an education. Administration of the law is entrusted to the State Auditor. For the year 1927 only 21,500 persons filed returns.[56]

South Carolina. In contrast to Oklahoma and Missouri, South Carolina is reaching a relatively large proportion of her taxable income. As Table III indicates, she collected in 1927 over 83 per cent as much as the federal government, being exceeded in this respect only by Mississippi. This represented a marked increase over 1922. The South Carolina receipts have averaged a little less than $2,000,000 per year, even though the state is predominantly agricultural, and constitute one-eighth of the total state tax receipts.[57] The Tax Commission reports that, due to depressed agricultural conditions in South Carolina during the past several years, the state could have made little progress without its special taxes. Excepting automobile and gasoline taxes, the state income tax is the most productive of these special taxes. Cost of administration in 1926 was about 3.9 per cent, a figure somewhat higher than the average.[58]

South Carolina furnishes an interesting example of an attempt through a state law to "swallow" the federal income tax law. The 1922 income tax act required individuals and corporations to pay to the state one-third of the income taxes paid to the federal government, including surtaxes and excess profits taxes.[59] The Tax Commission was given powers analogous to the powers of the Commissioner of Internal Revenue of the United States. While this law had some advantages, it proved to be unworkable. The state authorities, because of the secrecy clause in the federal law, had no means of discovering when additional taxes were assessed by the federal government. This was important because the additional taxes collected by the state amount to about one-tenth of the taxes voluntarily paid. The greater part of such taxes are collected from foreign corporations doing business in the state. It was found to be necessary, therefore, to pass a new act. This was done in 1926. The new law provides for graduated rates

[55] *Ibid.*, Laws of 1921, ch. 44.
[56] *Ibid.*, Biennial Report of the State Auditor, 1928, p. 31.
[57] South Carolina, *Reports of the Tax Commission*, 1922-27.
[58] *Ibid.*, *Report of the Tax Commission*, 1926, p. 12.
[59] *Ibid.*, Income Tax Act of 1922, Section III.

ranging from 1 per cent on the first $2,500 of net income, defined in a manner similar to that of the federal law, to 5 per cent on all in excess of $15,000.[60] The rate for corporations is 4 per cent. Exemptions are $1,500 for single persons and $2,500 for married persons, plus an additional $400 for each dependent. Information at the source is provided for, and full examination of returns is required. Administration is by the Tax Commission, which appoints the Income Tax Director who supervises the assessments and collections.

Virginia. Taking into account the relatively large amount of taxable income in the state and her long experience with income taxation, Virginia has not made as good a showing as might have been expected, although there has been improvement during the period under study. Until 1927, when over $3,000,000 was collected, she derived on the average less than $2,000,000 per year from the income tax; in 1918 receipts were only $660,000.[61] In relating the state income tax receipts to federal receipts she was outranked in 1927 by all of the states except Missouri, Montana, and Oklahoma. She also ranks below the average in the proportion of total state tax receipts derived from the income tax. As related to the general property tax, however, the income tax shows up much better. In fact, Virginia has not had the general property tax since 1915, when a classified property tax was adopted. In 1926 a complete separation of state and local revenues was reached, intangible property then being taxed exclusively by the state.

The smallness of the receipts from the income tax prior to 1927 was largely due to the moderate rates which did not rise above 2 per cent. The present law, however, has partly remedied this defect; the receipts jumped from $1,750,000 in 1926 to $3,417,000 in 1927.[62] The rates now in effect vary from 1.5 per cent on all net incomes under $3,000 to 3 per cent on all incomes in excess of $5,000.[63] The rate for corporations is 3 per cent. The personal exemptions were kept at $1,000 for single persons and $2,000 for married persons. It remains to be seen whether Virginia will fully exploit the state income tax field.

Wisconsin. Wisconsin has been conspicuously successful, throughout the period, in taxing incomes. Her income tax revenue has risen from a little over $6,000,000 in 1918 to almost $19,000,000 in 1927.[64] The doubling of the receipts since 1925 has been due partly to the removal

[60] *Ibid.*, Income Tax Act of 1926, Article II.
[61] Virginia, Letter from the Auditor of Public Accounts.
[62] *Ibid.*
[63] Bureau of the Census, *Digest of Revenue Laws relating to Income Taxes in Force in 1928.*
[64] Wisconsin, Tables supplied by the Tax Commission.

of the personal property tax offset. Although 60 per cent of the $19,000,000 was distributed to the localities, yet the remaining amount constituted 42 per cent of the total tax receipts of the state and 125 per cent of the collections from the state property tax. No state gets as large a proportion of its tax revenue from the income tax, and no state, except Mississippi, has made as great a gain in this respect during the period. Together with all its political subdivisions, the state of Wisconsin derives from personal and corporation income taxes more than ten per cent of its total tax revenue. In summarizing a discussion of the law, Commissioner Kimball states that "the income tax law in Wisconsin has, in the estimation of most people, proven successful and is as popular as any tax law can reasonably be expected to be. . . . . I can safely say that we feel no fear that our income tax law will be materially changed. Both political factions in the recent campaign emphatically upheld the principles of income taxation."[65]

Although the provisions of the Wisconsin law are more or less generally known, yet it may be worth while, in view of its success, to emphasize some of its most significant features. The 1927 law again blazed the way for other states. Two important changes were made in the existing statutes, one with respect to personal exemptions, the other with respect to the income to be assessed.[66] The new law allows an exemption of tax, $8.00 for single persons and $17.50 for married persons, instead of an exemption of income. The effect of the old law was to allow taxpayers having a large income many times the exemption given to the taxpayer with a small income; the exemptions were really progressive. For example, a single man earning $1,000 net income was allowed an exemption which amounted to an $8 reduction in his tax; a single man with $12,000 net income a tax reduction of $45. In assessing income, an average for three years is taken instead of a single year. This change will probably tend to make the income tax less elastic, and will be of great advantage particularly to those deriving income from the sale of capital assets and from business. Income accruing over a period of years, but realized in one year, or sudden increases in business income after former losses will not have, to as great an extent as before, the effect of throwing the taxable income into the higher brackets. This provision further complicates the law, and its constitutionality has not been tested; but it is probably desirable from the viewpoint of equity.

Although there were other changes in the law, such as those allowing the deduction of dividends from corporations and those simplifying the old provisions, yet the rates were kept as they were in 1911. As will

[65] *Ibid.*, Letter from the Tax Commission.

[66] Wisconsin, Statutes, 1927, ch. 71.

be recalled, they range for individuals from 1 per cent on the first thousand to 6 per cent on the twelfth thousand, and for corporations from 2 per cent on the first thousand to 6 per cent on the sixth thousand. Little needs to be said about the administration of the law. It is sufficient to point out that the Wisconsin Tax Commission and the state's system of general assessment have proved to be the models for other states. The cost of assessing and collecting the 1927 income tax was only 1.3 per cent.

A few brief conclusions may be drawn from this discussion. First, the state income tax, on the whole, has thoroughly demonstrated its success. An instrument which at present yields for the states concerned revenue equal to one-fifth of the federal income taxes collected from similar sources, to nearly one-fourth of the total state tax receipts, and to one and one-half times the collections from the general property tax, at an average cost of 2 per cent, is a satisfactory fiscal device.

Second, in general the state income tax has greatly increased in importance since 1918. At that time this tax produced for the states employing it a revenue amounting to less than one-sixth of the comparable federal income tax receipts, to one-eighth of the total state tax receipts, and to less than one-half the collections from the general property tax. In 1927 the corresponding percentages were 19.3, 23.1, and 155. Here is another indication of the declining relative importance of the general property tax.

Third, considering the purpose of the laws and the economic conditions existing, the state income tax may now be judged a fair fiscal success in each of the fourteen states, except Oklahoma and possibly Missouri. Mississippi and South Carolina have demonstrated clearly that a properly drawn law can be made to supply a large part of the state revenue in an agricultural state. It would seem, however, that the state income tax is not so well adapted to a sparsely settled state like North Dakota.

Fourth, the trend of the state income tax rates has been upward since 1918, and generally speaking, the administration of the state laws has been improved. Oklahoma and Missouri are notable exceptions. The careful audit of returns has shown strikingly good results whereever tried. There is still, of course, great diversity in the laws, and there are many theoretical defects in them.

Fifth, in order to produce relatively large amounts of revenue, the state income tax laws must be carefully related to the economic conditions in the state involved. The laws should be comprehensive in scope; should generally provide relatively low exemptions; should specify pro-

gressive rates, ranging from about 1 to 6 per cent; should define income similarly to the federal law, with, of course, the necessary variations; should allow no credits against the tax; and should by all means be administered by a centralized, specialized body. South Carolina's experience indicates that a state law levying an income tax based upon a given percentage of the federal income tax is unworkable. The experiences of Montana, New Hampshire, and Oklahoma show that in states at their stages of development large amounts of revenue cannot be expected from laws too limited in scope. On the other hand, Connecticut has demonstrated that in an industrial state a good law limited to corporations will produce considerable revenue. Delaware shows the danger in exempting various classes of income. The depressing effect, in a moderately developed state, of exemptions at too high a level is shown by Oklahoma; while New York proves that in a highly developed state exemptions may be set at a relatively high level. The ineffectiveness in some states of rates too low is indicated by the experiences of Delaware, Mississippi, Missouri, North Carolina, Oklahoma, and Virginia. On the other hand, North Dakota shows that it is injudicious to impose exorbitant rates. In a state like New York rates may well be at a lower level. North Dakota's experience also indicates that a complicated law, drawing distinctions between earned and unearned incomes, is too hard to administer. Property tax offsets have been dealt a *coup de grâce* in Mississippi and in Wisconsin. That centralized administration is essential is abundantly proven by the experiences of Delaware, Mississippi, Missouri, and Oklahoma. In short, the recommendations of the National Tax Association are amply borne out.

TRUMAN C. BIGHAM

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MEANING AND SIGNIFICANCE OF CORRELATION COEFFICIENTS

A recent article[1] indicates the lack of general agreement among economists as to the proper interpretation of the results of correlation analysis. It therefore seems desirable to state briefly and clearly what the principal statistical constants obtained by this process mean, and how they may be interpreted.

The basic constants resulting from a simple correlation analysis are (1) the regression coefficient; (2) the standard error of estimate; and (3) the coefficient of correlation. The coefficient of correlation is the best known of the three, but the others may frequently be of value in a given case.

The meaning of each of the three constants may be illustrated by a simple case. The following figures show the total live weight of hogs slaughtered annually, and the average market price, for six years. This is a much smaller number of observations than would ordinarily be employed in correlation work, but serves to illustrate the meaning of the coefficients.

Year beginning November 1	Live weight of hogs slaughtered under federal inspection, in billions of pounds (X)	Average cost to packers in dollars per 100 pounds adjusted to 1928 price level (Y)
1922–23	11.7	7.62
1923–24	11.8	7.61
1924–25	10.3	10.71
1925–26	9.7	12.16
1926–27	10.0	10.84
1927–28	11.0	9.10

Calling hog slaughter X, and prices Y, correlation analysis of these data yields the following constants.[2]

Coefficient of correlation: $r_{xy} = -.99$
Regression coefficient: $b_{yx} = -2.087$
Standard error of estimate: $S_e = 0.22$ dollars

[1] R. Henry Rowntree, "Measuring the Accuracy of Prediction," Amer. Econ. Review, September, 1928.

[2] These are computed by the usual formulae, as follows:

Let M_x = mean of X; M_y = mean of Y.

$$X - M_x = x;\quad Y - M_y = y;\quad \sigma_x^2 = \frac{\Sigma x^2}{n} = \frac{\Sigma X^2 - nM_x^2}{n};\ \text{similarly, } \sigma_y^2 = \frac{\Sigma y^2}{n}$$

Then

$$b_{yx} = \frac{\Sigma xy}{n\sigma_x^2};\quad r_{xy} = \frac{\Sigma xy}{n\sigma_x\sigma_y};\quad S_e = \sigma_y\sqrt{1 - r_{xy}^2}$$

The regression coefficient affords the basis for estimating values of Y from known values of X. It shows that for every change of one billion pounds in hog supplies, hog prices tend to change 2.09 dollars in the opposite direction. It may also be expressed in the form of the regression equation:

$$Y = a + b_{yx}X$$

for this particular problem[3]

$$Y = 32.11 - 2.087\,X$$

This equation gives a definite basis for estimating hog prices from known hog supplies. Thus in a year when ten billion pounds of hogs were slaughtered, the most probable price, as found by substituting 10 for X in the equation, is $32.11 - 2.087(10) = 11.24$. This is very close to the price of $10.84, secured in 1926-27 for a supply of that amount. If this same operation is carried through, using in turn the supply for each of the years included in the study, the following results are obtained:

Year	Actual price (Y)	Price estimated from supply (Y′)	Excess of actual price over estimated (Y−Y′)
1922–23	7.62	7.69	−.07
1923–24	7.61	7.48	+.13
1924–25	10.71	10.61	+.10
1925–26	12.16	11.87	+.29
1926–27	10.84	11.24	−.40
1927–28	9.10	9.15	−.05

It is evident that when the regression equation is used for estimating prices, it fails to give exactly the right price, and a residual amount is left over. The standard error of estimate indicates about what this residual, or error in estimating, is likely to be. The standard error of estimate in this case, 0.22 dollars, is the standard deviation of the series of residuals shown above. It indicates that as long as the conditions which affected hog prices from 1922 to 1928 remain the same, annual hog prices may be estimated from hog slaughterings by the equation shown with a standard error of 22 cents; that is two-thirds of the estimated prices will agree with the actual prices to within that limit.[4]

The *coefficient of correlation* shows how important the independent variable—slaughter, in this case,—is as an indicator of variation in the dependent variable—hog prices. Dividing the standard deviation

[3] The constant a is computed by the formula $a = M_y - bM_x$.

[4] For small samples, this statment is subject to certain modifications. Note article by the present author, "Application of Theory of Error to Multiple and Curvilinear Correlation," in the *Proceedings of the American Statistical Association*, 1928. (Supplement to the *Journ. Amer. Stat. Assoc.*, March, 1929.)

of the estimated prices by the standard deviation of the observed prices gives the coefficient of correlation, which therefore measures the ratio of the variation in the forecasts to the variation in the observed values. The usual formula for the correlation coefficient is mathematically correct as a method of computation, but fails to reveal the meaning of the coefficient. Where the estimated values agree perfectly with the actual values, the correlation will be perfect, with r equal to +1 or —1. The sign simply indicates whether high values of one variable tend to be associated with high values of the other (+) or *vice versa* (—).

The suggestion has been made[5] that the significance of the correlation can best be judged by the reduction in the standard error of estimate; that is, by $1-\sqrt{1-r^2}$ instead of by r.

Certain mathematical relations will help explain this proposal. Letting Y′ denote values for Y estimated by the regression equation from corresponding values of X, we may let Z represent the differences, or errors of estimate. That is:

$$Z=Y-Y'$$

The standard deviations of these three series are related as follows:

$$\sigma_z^2=\sigma_y^2-\sigma_{y'}^2,$$

or,

$$\sigma_y^2=\sigma_{y'}^2+\sigma_z^2$$

Dividing by the first term,

$$1=\frac{\sigma_{y'}^2}{\sigma_y^2}+\frac{\sigma_z^2}{\sigma_y^2}$$

The first of the two terms is the square of the coefficient of correlation; the second is the standard error of estimate divided by the standard deviation of Y, both squared.

The last equation shows that the (squared) variation in Y′, the part that *can* be accounted for, varies exactly inversely to the (squared) variation in Z, the part that can *not* be accounted for. If we take the square root of the first term, as we do when we use the coefficient of correlation as our criterion, we over-estimate the variation accounted for; if we take the square root of the second term we under-estimate the variation accounted for. For that reason it seems preferable to use r^2, the "coefficient of determination," as the best measure of the closeness of relationship.[6] The advantage in the use of r^2, rather than

$$r,\ \sqrt{1-r^2},\ \text{or}\ 1-\sqrt{1-r^2},$$

[5] Ralph J. Watkins, a criticism of "Economics of Business Fluctuation in the United States, 1919-1925," American Economic Review, Sept., 1928, pp. 490-492. Also, Rowntree's article, *loc. cit.*, pages 480-482.

[6] This agrees with R. A. Fisher's interpretation, in "Statistical Methods for Research Workers," second edition, page 147.

can be illustrated by a simple arithmetic example. It can readily be proved algebraically for more complex examples.

In the following example, A and B are two series of numbers, taken so as to have zero correlation with each other. C is a similar series, obtained by adding A and B together.

A	B	C
1	4	5
2	2	4
2	6	8
3	4	7

To calculate the correlations, we express each series as deviations from its mean (this long method is used here for clarity), and compute the squares and products shown.

	a	b	c	a^2	b^2	c^2	ab	ac	bc
	−1	0	−1	1	0	1	0	1	0
	0	−2	−2	0	4	4	0	0	4
	0	2	2	0	4	4	0	0	4
	1	0	1	1	0	1	0	1	0
Sums				2	8	10	0	2	8
Standard deviations				.71	1.41	1.58			

The sum of the products *ab*, it is noted, is zero, showing the absence of correlation between A and B. The other correlation coefficients can next be computed, giving $r_{ab} = .45$, $r_{ac} = .89$; and hence $r^2_{ab} = .20$, $r^2_{ac} = .80$.

Using r^2 as the measure of correlation, indicates that 20 per cent of the variance in C is accounted for by A, and 80 per cent is accounted for by B. Accordingly *all* of the variance is accounted for by the two together; and this, we have seen, is in accord with the facts. (Note that only in the particular case used here, of zero correlation between A and B, can the simple determinations by each of them separately be added together to measure the determination by both of them together. When A and B are themselves correlated, multiple correlation must be employed to measure the separate determination by each.) The coefficient of determination, r^2, is the only coefficient which directly measures the proportion which each component has contributed to the total variance present. If

$$r,\ \sqrt{1-r^2},\ \text{or}\ 1-\sqrt{1-r^2},$$

were used as the criterion, the contribution would be over-estimated or under-estimated.

The conclusion suggested by Watkins, that only correlation coefficients as high as r=.80 or higher are really significant, seems to be

rather too stringent in the light of these facts. A coefficient of .80 means that about 64 per cent of the variance in the dependent factor is associated with the independent factor; even as low a coefficient as .70 means that almost one-half of the variance is associated. Whether or not that much association is important in a particular case depends on the nature of the problem, but it certainly is enough for the relation to be significant. If it is not, then we must conclude that for the problem shown A is not significantly related to C.

The coefficient of correlation, the regression equation, and the standard error of estimate, if properly understood and used, are quite sufficient for the needs of the economic investigator. Further, for most purposes, r^2 is probably a better criterion of significance than

$$r, \sqrt{1-r^2} \text{ or } 1-\sqrt{1-r^2}.$$

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COMMUNICATIONS

Measuring the Accuracy of Prediction

Certain errors which appeared in my article, "Measuring the Accuracy of Prediction," in the September number of the AMERICAN ECONOMIC REVIEW should be corrected.

First, in discussing the Pearsonian coefficient of correlation in Section IV, pages 480 and 481, the phrase "percentage change in deviation" was used several times in an attempt to explain what is meant by perfect correlation. As a result of trying to state the explanation in everyday terms, I was led into an oversimplification of the definition which is erroneous. A correct statement would read as follows: "If a deviation from the mean of the independent (forecasting) variable in terms of its standard deviation is always accompanied by an identical deviation from the mean of the dependent (actual) variable in terms of its standard deviation, and in the same direction, correlation is direct and perfect."

Second, in discussing the importance of given values of the coefficient of correlation, on page 482, it was said that: "When $r = .6$, the standard error of the standard deviation of the forecasted series has been reduced by 20 per cent of the standard error when $r = 0$." This was incorrectly phrased, for when $r = 0$, the standard error *of estimate* is equal to the standard deviation of the dependent variable; and when $r = .6$, the standard error of estimate is 20 per cent smaller than the standard deviation of the dependent variable. That is to say, as the degree of correlation increases, the standard error of estimate decreases relative to the standard deviation of the dependent variable.

Third, the significance of a perfect coefficient of correlation was erroneously stated on page 484, where it was said that: ". . . . a perfect coefficient of correlation indicates that the forecasted series and the actual series are always identical. It is now evident that this supposition is erroneous." The statement which I criticized is correct; and my misstatement was due to my confusion of the independent variable with the estimated values for the dependent variable computed from the values of the independent variable.

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Wages and the Collective Wage Bargain

Mr. Garrett's article in the December Review is vulnerable on several grounds which will be obvious to economists. Inasmuch, however, as the issue with which it deals is one upon which many people who are not economists presume to have strong opinions, it is advisable to point out the more fundamental defects. I will take Mr. Garrett's three cases in order.

Case (a). In his first case Mr. Garrett assumes the disturbance of an equilibrium position by the intrusion of new supplies of labor sufficiently large to alter the general wage-level. I will ignore the fact that this could come about only through a drastic revision of immigration law or an abrupt increase in the birth-rate, and examine the case on the condition stated. Two processes of adjustment are described.

1. Money wages decline, profit margins are extended, and an increase of production takes place. Mr. Garrett states that in the absence of an increased monetary supply (including bank deposits) a fall in prices is necessary to sell the increased output. The assumption is highly artificial, but if it is allowed Mr. Garrett should point out that the fall in real wages is less than the fall in money wages. Actually, with a normal expansion of bank deposits, no fall in prices is inevitable. Why should output be expanded beyond the point which the addition to the effective demand for goods would justify? If it is, there is faulty estimating. The correct way to state the result is simply that the reduced marginal productivity of labor (other things unchanged) will affect the wage-level. But if Mr. Garrett means that the increased labor supply will result in new equipment as well as increased production, then it may be assumed that the marginal productivity of labor will be not less than before, and the new equilibrium will be not less favorable than the old. Mr. Garrett practically admits this on p. 675. The deciding factor will be the elasticity of capital supply at the rates of return in question.

2. "If, on the other hand, a boom develops, expansion of capital facilities may proceed rapidly up to the very point of complete absorption of the labor supply." This expansion, the argument runs, will eventually be checked by contraction of credit. Why Mr. Garrett should assume (p. 673) that wages continue to rise past this point when prices have started to fall, is not sufficiently clear. He goes on to postulate a period of depression in which prices and profits are rapidly falling. "It would seem, however, that with wages allowed to move freely, depression could not long endure. The contraction of bank credit, which in the past has usually attended the onset of a trade depression, never proceeds very far. Within a few weeks the banks are usually ready and anxious to extend loans." To whom? For what purpose? If Mr. Garrett means, as he must mean, for the restoration of effective demand for consumers' goods, I can only say this is the most optimistic theory of the depression cycle I ever came across! Unrestricted wage-cutting (Mr. Garrett's assumption) will not cure the ills of over-equipment, as by this time we know from experience. The net result, when a new equilibrium is reached, is likely to be less favorable to capital than labor, owing to the operation of the law of decreasing returns to individual factors of production. (Pigou, *E. of W.*, V, iii.)

Case (b). In this case the equilibrium is disturbed by "an increase in production resulting from improvements in the technic of industry and business reorganization." Money supply is assumed constant. "The initial effect will be over-production and consequent fall of prices. Profit margins being thus narrowed, failures and abandonments will rise, new enterprises and expansions will fall off. Unemployment will appear. Wages will move downward." Not in the least. The fall in prices is, by hypothesis, due to technical advance. It does not therefore entail narrowing profit margins and the rest of the cycle.

Case (c). Inflation, dealt with on the usual lines of wage-lag.

Mr. Garrett then asks what will happen to each of these cases if there is friction in wage-adjustment owing to unionism. In case (a) it is assumed that the absorption of the new labor will be indefinitely prevented, "that the product of industry is reduced by what the unemployed might have pro-

duced, and that the percentage of the smaller product going directly in wages is probably not larger than that which would go from the larger product in the absence of collective bargaining." But the product of industry is not "reduced," it is merely not expanded, and the "percentage" will certainly be larger than it would if the general fall in wage-rates were permitted. For there is a concealed assumption that the elasticity of demand for labor is lower than for capital. This becomes evident when it is recalled that the whole situation arises from the appearance of new supplies of labor with other factors unchanged. It may be true that the new labor will eventually be absorbed at "a new wage level such as again to give equilibrium profits"; but the new equilibrium is different from the old one since the marginal productivity of capital has been increased relatively to labor. If unionism is strong enough, and chooses, to resist the intrusion of new labor all along the line, then, as Mr. Garrett says, the expense of maintaining the unemployed will fall either upon unionism or upon the general community. As a matter of fact, in this very remote case it is much more likely to fall upon the community. But in specific industries unemployment of this type is frequently supported from union funds, on the assumption that the gain in the living standards of the section affected, and by sympathy upon other similar sections, will more than compensate the temporary cost. This assumption is usually correct; for the final outcome depends upon the relative inertias of the production balance in the case immediately affected and in industry as a whole. The latter is generally the lesser. If, however, the displacement expense is met by the general community, it may still for a similar reason be compensated in the long run. There is incidentally no warrant for Mr. Garrett's assumption that funds derived from the income tax are necessarily at the expense of saving, or that state expenditure is necessarily and totally unproductive.

In case (b)—expanding production following technical improvement—the argument, as [illegible] shown, does not establish the necessity for a wage-cut. Mr. Garrett confuses this case with the sudden displacement of labor through the introduction of machinery for handwork, and goes on to talk about the elimination of marginal establishments. At the same time he maintains that selling prices must fall, interest rates rise, and money wages be reduced to offset the latter item. This is seriously at variance with the facts. The expense of new capital equipment is not taken out of current wages, least of all under the circumstances assumed by Mr. Garrett of an increase in the average productivity of enterprise. The new scale of production is by hypothesis more profitable than the old, and for that reason there is the prospect of reabsorption of displaced marginal workers even if a normal elasticity of demand for the product is allowed for.

In case (c)—inflation—Mr. Garrett argues that collective bargaining is limited by the fact that middlemen get most of the benefit, and tacitly assumes that none of this can be transferred to labor via the manufacturer acting under pressure. The assumption is contrary to all experience. He also cites the familiar argument of the greater "stickiness" of wages on a falling market as an influence making employers more cautious on the rise. But this is no argument against collective bargaining as such. What Mr. Garrett really objects to is any degree of stability in the wage structure.

Finally, Mr. Garrett cites the well-known possibility in partially organized industry of the strong groups securing their advantage at the expense of

the unorganized, and takes it for granted that this constitutes a case against the organization of any. This particular argument has been much overworked. The fact of an organized group (usually a skilled group) forcing a wage advance in a given industry does not of itself alter the labor supply situation for other groups. A reduction of the rates offered to these groups therefore is likely to affect the supply. But the supply is not an arbitrary consideration, and it is not a matter of indifference to the employer whether the amount of this labor he engages is diminished. Working conditions usually prescribe the balance of grades within quite narrow limits. Further, wage pressure in an upward sense is likely to arise from these groups at the very time the employer is supposed to be able to cut their rates, owing to the tendency to preserve differentials.

Mr. Garrett's attempt to cite British experience in support of his argument is not corroborated by British investigators. "No reasonable explanation other than the difference in labor conditions has been suggested for the almost continuous trade stagnation of Great Britain since 1918 in contrast to the almost continuous state of high industrial prosperity in America." This might just as well be taken to mean that the difference is due to the high wage-levels in America. An acquaintance with such documents as the Liberal Industrial Report (sponsored by J. M. Keynes, Sir Herbert Samuel, Sir Josiah Stamp, W. T. Layton, D. H. Robertson, H. D. Henderson and others whom economists must respect) supplies many alternative "reasonable explanations" for the trade stagnation in Britain; and in no responsible investigation whatever is the practice of collective bargaining cited as a cause. On the contrary, that practice is everywhere upheld, not only by special investigators but by the official Balfour committee and by the government. "Trade unionism," says the Liberal Report, "is indispensable as a means of insuring that the workers are fairly treated. It is invaluable for the smooth working of big-scale industry. But, more than that, it has contributed very greatly, and it can contribute even more, to the forwarding of efficiency in production which is the source of rising wages."

Mr. Garrett's argument ignores this aspect of the matter completely, though it is now an essential part of modern wage economics (*e.g.*, the work of J. W. F. Rowe). The argument seems to be based on assumptions not fundamentally different from those of the "iron law," and on a preoccupation with the more short-sighted policies of one section only of American unionism. The work of such societies as the Amalgamated Clothing Workers or the Full-Fashioned Hosiery Workers, which do concern themselves with efficiency, should be borne in mind in order to avoid injustice to organized labor. The time is past when economists can accept for their data a set of *a priori* assumptions. In the light of modern reasoning, Mr. Garrett's argument is no more tenable than its Ricardian predecessors.

William Orton

Smith College

FURTHER COMMENT BY MR. GARRETT

Mr. Orton has not met my argument. I challenged the commonly accepted wage theory as inadequate and misleading. I offered what seems to me the required correction, and showed by means of some hypothetical examples, how wage determination must proceed. The essence of the argu-

ment, given in section II of the article, Mr. Orton completely ignores. An adverse criticism ought, I should think, either to attempt a refutation of my theory or to show that my deductions do not logically follow from it. Mr. Orton attempts neither. His criticism for the most part reduces to this, that he and other economists, using the older (and, as I hold, defective) theory reach different conclusions from mine. Of course they do. My reason for writing was to point out that current theory leads to wrong conclusions.

Where his theory affords him no help Mr. Orton offers in support of a statement, "as we now know from experience." As I intimated in my article there does not yet exist in this field a body of data sufficiently complete and reliable to allow a scientifically cautious investigator to draw definite conclusions "from experience."

Mr. Orton thinks I should have substituted for a plain statement in ordinary English, talk about the marginal productivity of labor. I intentionally avoided the use of the marginal productivity concept because it is based on an incorrect account of entrepreneur procedure, is ambiguous, is needless, and allows the unwary economist to imagine he has reached a solution of his problem when in fact he has found only a bad way of stating it.

I cannot agree with Mr. Orton that my argument is based on assumptions not fundamentally different from those which led to the formulation of the iron law of wages. Common to both, to be sure, is the recognition that normal market price is at a point which will equilibrate demand with supply but the assumption which led to the dictum that wages must always remain at the level of subsistence was quite different from the considerations which lead me to the opposite conclusion that wages will certainly rise to the highest level consistent with full employment.

It may be or may not be, as Mr. Orton says, that labor organizations increase the efficiency of their members. Either way it is not germane to the subject I was discussing, which was collective wage bargaining. If, as may well be, labor organizations can be useful in this and other ways, well and good. I was not writing for or against labor unions. I was pointing out that the particular activity known as collective wage bargaining could not raise the wage level but could easily bring much misery to workers by increasing unemployment.

Mr. Orton accuses me of going astray from my own premises in the discussion of case (b). If he will bring together in his mind the scattered parts of my discussion (pages 671, 673, 674, 676, 682), he will find he is wrong. I must admit that the portion on pages 673 and 674 was badly stated and that, did it stand by itself, it would give some warrant for his comment.

Since Mr. Orton missed it completely, I infer I laid insufficient stress on the importance of projects within enterprises as affecting the demand for labor. Thousands of decisions regarding such projects—whether to begin, to defer, or to abandon—are made every working day. Their importance is not alone because of the magnitude of their aggregate effect but also because of the way their number affects the sensitivity of response of labor demand to changes in profit prospects. It is not possible to predict with certainty that even a large change in profit prospects will alter any one particular decision; but in accordance with a well-known principle it is

possible to say that where many thousands of decisions are involved concerning projects presenting all possible gradations of merit, the relative number of affirmative and negative decisions will be altered by even minute changes in profit prospects. It is this fact which vitiates the usual assumption that in the absence of collective bargaining, wages can remain below the point of theoretic equilibrium.

S. S. GARRETT

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Equation of Exchange and the Business Cycle

In the AMERICAN ECONOMIC REVIEW, March, 1929, Miss Whitney criticizes my treatment of the equation of exchange and the business cycle (AMERICAN ECONOMIC REVIEW, December, 1928). Her contentions are perfectly valid when the symbols of the equation are used with the definitions and meanings which Professor Fisher and others have attached to them. And it is readily seen that I have not redefined the equation sufficiently to make my use of it clear or accurate. The impression is given that M and M′ are used in their familiar meanings. In contrast, although not clearly so stated, I have used M to symbolize "the volume of money in circulation"[1] at the start of the cycle (the point of normality at the beginning of prosperity).[2] Thus M, used here in its broad sense, includes all of those credit instruments (bank deposit credit, bank notes, fiat money, and so forth) which are in permanent circulation and which pass generally as the means of making final payment; while M′ symbolizes the credit expansion which takes place during the subsequent period of prosperity, "the amount of credit extended."[3] Further, my explanation of the business cycle will be found to be complete without a treatment of the equation of exchange. The inertia of previous usage makes it appear best that my analysis of the cycle be evaluated with that section entirely omitted.

In justice to my explanation, therefore, it should be pointed out that this criticism does not refute the fundamental contention advanced, to the effect that the cause of the business cycle lies in the *expansion and contraction* of credit in successive cycles.[4] Such expansion and contraction takes place in mercantile or book credit equally as effectively as in bank credit.[5] Further, as a more or less practical suggestion, it was pointed out that credit stabilization would be sufficient to eliminate the business cycle as it would get rid of expansion and contraction. However, such stabilization of mercantile or book credit, as well as of bank credit, fiat money, and so forth, seems to be a hopeless and futile concept in view of past experience. The abolition of those credit instruments now in permanent circulation and those transactions which lead to credit expansion seems more practicable.[6] But this does not apply to loan transactions, such as those made by life insurance companies, savings banks, and by individuals, which serve merely to relocate purchasing power but not to expand it. Thus the proposal to abolish credit does not rest, as Miss Whitney concludes, on the particular form of notation in which the equation of exchange was expressed.

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[1] *American Economic Review*, vol. XVIII, no. 4, page 626.
[2] *Ibid.*, pages 625 and 626.
[3] *Ibid.*, page 626.
[4] *Ibid.*, pages 622, 623, 624, and 626.
[5] *Ibid.*, pages 619-621.
[6] *Ibid.*, page 626.

REVIEWS AND NEW BOOKS

General Works, Theory and Its History

Some Economic Factors in Modern Life. By JOSIAH STAMP. (London: P. S. King. 1929. Pp. vii, 279. 10s. 6d.)

This volume is not a single treatise, but an assembly of eight addresses delivered to widely differing audiences during 1926, 1927, and 1928. Possibly this accounts for an exasperating inconsistency which runs through the book: conclusions convincingly established in the first lecture frequently are ignored in later chapters. Apparently each lecture was edited for publication with little reference to the others.

Why does it give us joy to find an economist of recognized standing quoting John Ruskin? Can it be that we have neglected Ruskin to our loss, and that subconsciously we recognize our error? Sir Josiah's first chapter, on "Æsthetics," can best be described as a very effective justification of Ruskin, though by means quite different from Ruskin's. The same conclusions are reached through homelier channels of thought followed in less belligerent mood. Incidentally, this chapter is quaintly and delightfully written. On finishing it one wants more.

But when he turns to "Inheritance," "Invention," Industrial coöperation," "Amalgamations," "Stimulus," and "Statistical methods," Sir Josiah abandons the æsthetic in literary style as in discussion. Despite the interesting materials and the novelty of some phases of their treatment, it would be hard to find dryer reading. It is dry, not in thought but in expression.

Probably it is inevitable that the economist shall tend to become conservative. He devotes his life to the task of understanding and explaining relations as they are, and upon arriving at reasonable conclusions, he has so established his own brain-patterns that those conclusions thereafter seem to him not merely so, but rightly so. Then when he applies these conclusions as tests to other relations that are in process of establishment, he is likely to find the new relations not so complacently to be accepted as the old. So it is that he is likely to be more liberal of attitude and more progressive in thought when dealing with new tendencies than when discussing old institutions.

Our author is no exception. His treatment and conclusions on inheritance, invention, and amalgamations are quite what would be expected and entirely in accord with old-established account; while the lecture on new phases of industrial coöperation and the treatment of stimulus are fresh, independent and stimulating. These two should be read by all workers in the fields of industrial relations and management. The discussions are not pretended to be exhaustive, nor even

comprehensive; but they are highly suggestive and at times quite original. If there exists elsewhere in economic literature a truly clear and adequately defined distinction between "stimulus" and "incentive" in their economic significances, this reviewer is not aware of it.

The lecture on invention hinges upon a theoretical account of industrial gestation of mechanical innovations which seems rather inconsistent with the facts of American practice. A detailed demonstration that British practice is as our author assumes, would be most interesting. But occasional inconsistency with exterior fact is not so distressing as inner inconsistency of theory and conclusion: after arguing (p. 52 on inheritance) that men are much more affected by comparisons than by absolute facts, and quoting Dr. Dalton: ". . . . the economic welfare derived from an income depends not only on the absolute size of this income but also on its relative size as compared with other incomes," he passes on to take the opposite stand when discussing industrial coöperation, and seeks to clinch his argument (p. 141) with the flat dictum, "It is better to have 35 per cent of 120 than 40 per cent of 100." The contexts do not alleviate the shock of this conflict.

The final lecture, on "Human nature in statistics," was addressed to the Students Union, London School of Economics, and must have been a delight to all who enjoyed the half hour of its delivery; for here we find a return to the definite effort to put serious matter into quaint and interesting form.

On the whole the book is well worth a permanent place in the private library. It touches inspiringly on many neglected topics, and has materials for the social economist which will not be found elsewhere. Particularly it will please those who have lamented the economists' neglect of psychological and æsthetic elements in economic life.

John H. Sherman

Chicago, Illinois

NEW BOOKS

Abel, T. *Systematic sociology in Germany: a critical analysis of some attempts to establish sociology as an independent science.* Columbia studies in hist., econ. and public law, no. 310. (New York: Columbia Univ. Press. 1929. Pp. 169. $3.)

Benn, E. J. P. *The return to laissez faire: the foundation of prosperity.* (New York: Appleton. 1929. Pp. 221. $2.)

Bobtschev, K. *Wertbegriff und Ertragsgedanke.* (Sofia: T. F. Tschipeff. 1928. Pp. 104. R.M.2.50.)

Carver, T. N. and Carmichael, M. *Elementary economics.* Rev. ed. (Boston: Ginn. 1929. Pp. 598. $2.)

Foà, B. *Di alcune influenze del tempo sul valore.* (Milan: Albrighi, Segati & Co. 1928. Pp. 49.)

Freeman, R. E. *Economics for Canadians.* (Toronto: Pitman. 1928. Pp. xiii, 306.)

A very brief, elementary text, although well written. As suggested in the title, the figures and illustrations are almost all Canadian.

J. I.

Garver, F. B. and Hansen, A. H. *Principles of economics.* (Boston: Ginn. 1928. Pp. x, 726. $3.)

Much more definitely than most texts recently issued, this is a book of "principles"; and it follows the tradition of Marshall more closely than any American book that the reviewer has seen. Like Marshall, the author devotes much attention to the problem of value; and at various points the influence of Marshall is in evidence, for instance in occasional notes of pessimism and in a fairly firm faith in the efficacy of competition.

The theory of value is generally that of supply and demand, although more is made of marginal pairs, marginal producers, and marginal cost, than Marshall would make of those concepts. For instance, while the general theory is supply and demand, the authors state at one point: "The value of any good in its marginal use sets the price for the entire market." In the chapters on wages, similarly, the emphasis is on marginal productivity, although the authors presently concede that the marginal productivity theory of wages is not a final explanation of wages. "It is an analytical device for explaining how the forces of demand and supply are related in determining wages, given the supplies of all the factors and the state of productive technique."

Some of the chapters relating to value are largely abstract and theoretical, but in other chapters much use is made of statistical material. Almost everywhere there is a liberal use of graphs; and at the close of each chapter is a very interesting list of questions. In various connections there is evidence of reasonable familiarity with European economic thought.

The authors modestly disclaim any credit for originality in their work; yet there are many original ideas in the book, and it will make a valuable addition to the American literature on economic principles.

John Ise

Halévy, E. *The growth of philosophic radicalism.* Translated by Mary Morris. (New York: Macmillan. 1928. Pp. 571. $8.50.)

Homan, P. T. *Contemporary economic thought.* (New York: Harper. 1928. Pp. x, 475. $2.50.)

In this excellent piece of work, Mr. Homan has analyzed the economic doctrines of five contemporary economists: John Bates Clark, Thorstein Veblen, Alfred Marshall, John A. Hobson and Wesley C. Mitchell, with a concluding chapter on "The present impasse." Some critics will doubtless question his selection of these particular men, or at least of some of them, as the most significant men of the recent period. To others there will occur a doubt as to the value of so elaborate an analysis of the doctrines of men whose works are easily accessible, and fairly well known to all students of economics. Nevertheless, it will be conceded that the work is well done. The exposition is excellent, the style beautifully clear, and the book-making unusually good. Altogether it is a book which most economists can read with much profit.

J. I.

HOUSE, F. N. *The range of social theory.* (New York: Holt. 1929. Pp. x, 587. $3.60.)

This is an interesting, useful, and, so far as I can tell, competent survey of the development, literature, tendencies, and fundamental problems of the social sciences. The author is a sociologist, and other subjects are therefore discussed from the point of view of, and with special reference to, sociology. Designed for advanced students and teachers, this is much more than a reference book, although, of course, its chief value is as such. But Professor House does more than serve as a guide to literature; he has ideas and opinions of his own.

In surveying a large number of problems and topics from the point of view of their relation to social theory, this volume differs markedly from a recent work which it serves to supplement—Professor Sorokin's *Contemporary Social Theories,* which discusses various types of social theories. The material in Professor House's book has been arranged under three headings: "Geography and social differentiation" (8 chapters); "Human nature and collective behavior" (17 chapters); and "Conflict and social control" (10 chapters). There are also chapters on the history, logic, and trend of social theory.

A vast amount of material is intelligently and critically discussed, including many topics of special interest to economists.

MAURICE G. SMITH

HÜTER, M. *Die Methodologie der Wirtschaftswissenschaft bei Roscher und Knies.* Beiträge zur Geschichte der Nationalökonomie, Heft 5. (Jena: Fischer. 1928. Pp. viii, 108. R.M.5.60.)

JECHT, H. *Wirtschaftsgeschichte und Wirtschaftstheorie.* (Tübingen: Mohr. 1928. Pp. 44.)

KÜHNE, O. *Die mathematische Schule in der Nationalökonomie.* Band I, Teil 1, *Die italienische Schule (bis 1914).* (Berlin: Walter de Gruyter. 1928. Pp. xiv, 308.)

MARX, K. *Capital: a critique of political economy. The process of capitalist production.* Translated from the 4th German ed., by EDEN PAUL and CEDAR PAUL. (New York: International Publishers. 1929. Pp. xvi, 927. $3.75.)

A new translation of *Das Kapital,* Book I, based on the fourth edition, published in 1890 under the supervision of Engels. In the translation the authors have reproduced all polyglot originals by English renderings. There is also an interesting comment on Marx's use of the words "value" and "manufacture."

MAYER, H., FETTER, F. A. and REISCH, R., editors. *Die Wirtschaftstheorie der Gegenwart in Darstellungen von führenden Nationalökonomen aller Länder.* Band IV. *Konjunkturen und Krisen, internationaler Verkehr, Hauptprobleme der Finanzwissenschaft, ökonomische Theorie des Sozialismus.* (Vienna: Julius Springer. Pp. vi, 376. R.M.33.50.)

MICHAELIS, A. *Die Quantitätstheorie als Grundlage der Konjunkturforschung.* (Jena: Fischer. 1929. R.M.7.50.)

RICHARDS, R. D. *Groundwork of economics.* (London: University Tutorial Press. 1928. Pp. xv, 294. 4s. 6d.)

In spite of its brevity, this little book has much interesting material in it. Like many of the English works, it shows broad and thorough scholar-

ship. Nearly half of the book is devoted to questions of money and banking.

J. I.

RUFENER, L. A. ***Price, profit and production.*** **(Boston: Houghton Mifflin. 1928. Pp. xix, 842. $5.)**

This is a reprint of Rufener's ***Principles of Economics,*** **under a new name, designed to appeal to the general public.**

RUHLE, O. ***Karl Marx: his life and work.*** **Translated from the German by** EDEN PAUL **and** CEDAR PAUL. **(New York: Viking Press. 1929. Pp. 420. $5.)**

SALIN, E. ***Geschichte der Volkswirtschaftslehre.*** **(Berlin: Julius Springer. 1929. Pp. 106.)**

VORLANDER, K. ***Karl Marx: sein Leben und sein Werk.*** **(Leipzig: Felix Meiner. 1929. Pp. viii, 332.)**

Economic History and Geography

An Economic and Social History of the Middle Ages (300-1300). **By** JAMES W. THOMPSON. **(New York: Century. 1928. Pp. ix, 900. $5.00.)**

This study of the Middle Ages is the most substantial recent contribution to the general economic history of the period that has been made in any language. Although there has been much activity of late and excellent studies have been published by Boissonnade, Kötschke, Weber, Brentano, Knight, and Kulischer, the work of these writers has been less comprehensive. Some have concentrated attention upon a particular region of Europe, others have written with extreme compression of statement. Professor Thompson has developed genuine interest in the entire theater of western history, embracing the whole of the Nearer East and all portions of Europe not dominated exclusively by the northern Slavs. Hungary and the Balkans are thus included by the survey, but Russian territory is not systematically treated. Boissonnade, Weber, and Knight have included the Byzantine Empire in their narratives; but no writer on general economic history has given any significant attention to the Mohammedan world. Nor have other general texts given as much attention to the economic activity of the Church.

The volume is dominated by critical realism; the generalizations of the German nationalists and of the socialists have left no traces upon the text even by way of reaction. There are occasional references to Hildebrand's stages of natural and money economy, but no other generalizations appear. The volume is a summary of existing critical literature rather than a new synthesis, and it exhibits all the elements of strength and weakness that are inherent in such a concept of the task of the historian. The text covers the external history of the various

regions with extraordinary comprehensiveness; but the narrative lacks the coherence and consistency that might be secured by mature analysis of the functions of the various institutions at the successive stages of their development. The achievement of a truly coherent account of economic development in this period would undoubtedly carry any author considerably beyond existing literature; but the elements for such an interpretation are at hand, and the task is by no means impossible. Desirable as such an account would be, it is more than we may as yet require of any author.

Consistency of judgment, however, is especially important in a volume designed to be used as a text, and unfortunately the present study is deficient in this respect. The inconsistencies that appear are clearly due to a certain timidity of judgment. None of the primary controversial problems are handled decisively: the "origin of property in land," the rise of the manor, the "fall" of Rome, the extent of depopulation during the migrations, the development of feudalism, the relation of feudalism to social well-being, all these problems are treated with much vacillation. The more persistent problems show the influence of reading used in connection with different chapters; and the range of divergence is limited only by the variety of points of view present in existing literature.

The most serious inconsistencies occur with reference to the character of early German society. In an early passage we read: "But it would seem that the theory that the social organization of the ancient Germans rested upon the association of free men with equal social status and equal values in land ownership is exploded" (p. 92). Later we hear of "German freemen, preserving, until caught in the coil of feudalism, the social nature and economic practices of the ancient German village community" (p. 206). "The body of the Saxon people were free" (p. 285). "It is sentimental to regret the decline of ancient civilization or the disappearance of the ancient free German village community and the degradation of thousands of small freemen in the process" (p. 702). In the concluding passage on the subject (pp. 731-2), the German and Roman theories are both stated, without indication of adherence to either view, though the German theory seems on the whole to be favored.

General characterization of the feudal system does not occur so frequently, but we have both possible judgments. "Everywhere the dual régime of feudal and manorial government prevailed. The feudal state was divided and subdivided into a medley of compartments in which men dwelt as rulers or as ruled. Under these untoward conditions the cultural state of France in the tenth century lapsed to the lowest degree of degradation" (p. 303). Later we read : "The principles upon

which feudalism rested were different and of higher morality than the autocracy and slavocracy of the later Roman Empire. . . . . Feudalism . . . . was itself a civilization, a high culture which reached its apogee between 1150 and 1250" (p. 701).

As the text stands there are thus many contradictions: the actual vacillation of judgment, however, is not as considerable as might be supposed, because many of these inconsistencies spring from passages that were written in unguarded moments and do not represent the author's general position. These difficulties could all be overcome by deletions or small changes of phraseology. This feature of the text is thus a phase of the lack of care in the final revision of the manuscript that appears in other ways. Many colloquialisms detract from the dignity of the text; numerous awkward constructions survive; there is an unfortunate error in the legend of the map of Arab conquests, at page 182; no references are given for many of the direct quotations. These blemishes are not serious; but it is most unfortunate that the appearance of such a notable volume should be marred by editorial negligence. In this connection, too, we may express regret that conformity to the standards of the series of historical texts called for the sacrifice of the full apparatus of notes and bibliographical references; for the unusual scholarship of the work is very inadequately indicated by the brief references to literature. Students will find it difficult to use the the text as a guide to close critical study of the period. To an extent unusual in such general studies the present text rests upon an extensive reading of sources and monographic material, and in view of the broad scope of the volume the author's learning is astounding.

The volume is an expression of the recent "neo-medievalism," and it thus presents us with many revisions of historical judgments. The achievement rests in the main upon broader sympathies with early institutions, a wider range of knowledge, better appreciation of the relations between the Mohammedan and Christian groups, and deeper insight into the economic activities of the Church in feudal society. The chapters on the Church and upon Mohammedan culture are the distinctive features of the volume; and, as the revisions of judgment involved exert a powerful influence on the interpretation of the Crusades, they dominate a large mass of historical material and much of the present text. For the historian who wishes to have some economic background for the primary political events and constitutional problems, this volume will meet every requirement. The economist will find many questions unanswered; but, despite certain limitations, Professor Thompson has given us a volume that will for many years be invaluable to anyone deeply interested in the Middle Ages.

Harvard University ABBOTT PAYSON USHER

Southern Mill Hills. A Study of Social and Economic Forces in Certain Textile Mill Villages. By LOIS MACDONALD. (New York: Alex L. Hillman. 1928. Pp. 151.)

This is a case study of social and economic forces in three textile mill villages in North and South Carolina. Before pointing out the conditions in the villages studied, the author presents the background of the textile industry in the South and outlines the general organization of the Southern mill village. While no new material is introduced in the chapter on the background, the facts of the development of the industry, the influence of slavery and the Civil War in checking an earlier development, and the type of laborers engaged in the industry, are briefly shown. Probably the most interesting point emphasized in this chapter is that the industrial development of the South was planned, while in most other places such development had been largely accidental. Bringing industry into the South was considered an act of patriotism, almost of religion.

In the chapter dealing with the general organization of the mill village, the author points out the complete control exercised by the mill owners. Land, houses, stores, churches, and schools are owned or dominated by the mill. All social, intellectual, and recreational activities are to a large extent organized and directed by the employers. The typical mill village is an example of benevolent feudalism, variation consisting only in emphasis on benevolence or on feudalism.

In the detailed study of the three villages, the author presents her data under the following main headings: "History and policy of the mill"; "The workers themselves"; "The social organization of the village." The findings in the three villages were remarkably similar. While there was a difference in degree in the policies of the mills, yet they were alike in dominating the villages. In each case the workers had almost without exception been born within a few miles of their present village, they were alike in the meagerness of their education, in constantly moving from village to village, and their wages were uniformly low. Churches, schools, and other institutions nowhere played an important social role, and they were conducted largely by the mill management. As might be expected, the workers had little interest in anything beyond their immediate working conditions, and even here their lack of initiative and fear of the "boss" prevented any attempts at improvement. The author found little active interest in unions.

Because of the rapid development of the textile industry in the South, the present study is particularly timely. With this development have come the usual social and economic problems connected with a population changing from rural to urban living conditions and con-

nected with the impact of industrialism on a highly individualistic people. Social control has not kept pace with the changing industrial situation, and a vast amount of fact finding, interpretation of facts, and conclusions based on facts, is necessary for the formation of control policies. Dr. Macdonald confines herself rather largely to a report of the facts. Her work in this respect is extremely worth while, but the reviewer would have been glad if she had presented more of an interpretative analysis and had suggested more in the way of conclusions.

EARL R. SIKES

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NEW BOOKS

ALLEN, G. C. *Modern Japan and its problems.* (London: Allen & Unwin. 1928. Pp. 226. 10s.)

ALLEN, N. B. *Geographical and industrial studies: Europe.* (Boston and New York: Ginn. 1928. Pp. xvi, 419.)

ARENDT, W., compiler. *Die Staats und Gesellschaftslehre Albert des Grossen.* Band VIII. (Jena: Fischer. Rmk. 6.50.)

BANERJEA, P. *Indian finance in the days of the Company.* (London: Macmillan. 1928. Pp. x, 392. $5.)

This study of the financial administration of India brings together much material scattered through the larger histories and parliamentary inquiries. It adds important materials from the archives of India. Although much of the ground covered has been conspicuous in discussions of Indian affairs since the close of the eighteenth century, the volume affords a more compact and systematic survey of financial administration than has hitherto been accessible. The new material bridges many gaps neglected in the heat of controversy. Much effort has been bestowed on the reduction of the general revenue statements to a uniform basis to facilitate comparisons over the entire period from the acquisition of the Diwani to the establishment of the Secretaryship for India in 1858.

Despite the danger of intrusion of old controversies, the volume achieves a high degree of objectivity, but it is clearly impossible for anyone to deal with these matters in a spirit of complete detachment from current issues. There is vigorous emphasis upon the impairment of efficiency by the location of primary responsibilities in London. Wasteful multiplication of offices is criticized; and the introduction of Europeans into all the upper ranks of the Civil Service is the subject of adverse remarks. Administration fell notably below modern standards of efficiency. The surplus revenues of Bengal were applied for long periods to the deficits of Bombay and Madras. The extension of territorial power under aggressive administrations was financed by loans charged upon the local revenues, so that the natives bore the costs of the enlargement of the area under English control. Such historical issues have obvious importance in discussions of the present problems of the relations between England and India, even when presented with such judicious restraint as is the case in the present volume. There is no evidence of any attempt to as-

sociate these matters with current issues, but on the whole the tone of the text is critical.

Judged by modern standards of civil administration, the accomplishment of the Company in India could hardly be rated as a great achievement; but it is scarcely fair to apply higher standards than those of the time. Upon such a basis, and with a view to the genuine complications of racial contacts, one might well reach a more sympathetic judgment of the total achievement than seems to be implied by the author. But these imponderables are not obtrusive, and do not affect the direct presentation of the objective facts about the history of the administration.

A. P. U.

Baudin, L. *L'empire socialiste des Inka.* (Paris: Institut d'Ethnologie. 1928. Pp. ix, 294.)

Beales, H. L. *The Industrial Revolution, 1750-1850. An introductory essay.* (New York and London: Longmans Green. 1928. Pp. vi, 90. $.75.)

Belknap, H. W. *Trades and tradesmen of Essex County, Massachusetts, chiefly of the seventeenth century.* (Salem, Mass.: Essex Institute. 1929. Pp. 96. $5.)

Bell, S. *Industrial and commercial Ohio.* Vol. I, Part I. *The extent and basis of the industrial development of Ohio.* (Columbus: Ohio State University, Bureau of Business Research. 1928. Pp. xviii, 168. $7.50.)

Mimeographed sheets, with maps, charts and statistical tables. Covers all industries with payrolls of $5,000,000 or more.

Brady, A. *William Huskisson and liberal reform: an essay on the changes in economic policy in the twenties of the nineteenth century.* (New York and London: Oxford. 1928. Pp. 186. $4.25.)

Brigham, A. P. *Commercial geography.* Rev. ed. (Boston: Ginn. 1928. Pp. 504. $1.72.)

Burgess, J. S. *The guilds of Peking.* (New York: Columbia Univ. Press. 1928. Pp. 270. $4.)

A scholarly study which throws light upon the difficulties which China is meeting in its endeavor to adopt the ideas and methods of western civilization. "Familiarity with the social organization of old China and the resultant habits and attitudes of the people schooled in the old regime leads to a further question as to whether or not a more comprehensive knowledge of the ancient system of clan, village, and gild autonomy, with its consequent group loyalty and purely local interest and activity, might not be a means of gaining a more fundamental understanding of the chaotic conditions incident to the transformation of this nation into a new economic and political unity." The history of the gild is traced, and a description given of the membership, organization, meetings, finance, and charitable work.

Ehrenberg, R. *Capital and finance in the age of the Renaissance. A study of the Fuggers and their connections.* Translated by H. M. Lucas. (New York: Harcourt Brace. 1928. Pp. 390. $4.50.)

Although it is now more than thirty years since this book was written, it has held the attention of readers to such a degree as to require two reprintings in Germany; and despite much monographic work in this general field, there has been no comprehensive study that in any way sup-

plants it. The present translation will thus be most welcome to English students; but it must be recognized that this undoubtedly important work has many elements of weakness which will be felt even more keenly in the translation than in the original German. The care that was shown by Ehrenberg in dealing with biographical material and the external history of the dealings of the various financiers did not extend to the general features of the credit organization of the period. These problems suffered from the weakness in theoretical analysis so commonly found among German writers on historical subjects. The work of Freundt on the history of credit instruments; of Vigne on the Lyonese fairs; of Espejo and Paz on the fairs of Medina del Campo, cleared up many difficult questions which were not solved at the time the original text was written. The translator was thus in a postion to make many small revisions, and many verbal difficulties present in the German text might have been remedied. These opportunities were neglected and we have a bare literal translation which is incompletely reduced to the English idiom.

The reader will be puzzled by many of the technical terms: money-capital, finance (as a kind of loan), "deposito," "ricorsa" bill. These are literal renderings and some of the contemporary terms are not adequately explained in the original text, but translations are possible and really essential to English readers. The term money-capital (*Geldkapital*) was not happily conceived, though perhaps its meaning would seem less ambiguous to a German than a foreigner; for "Geld" is loosely used throughout the text, covering frequently credit transactions of the most explicit kind. No single translation would suffice, but with care the essential thought of the text could have been rendered. The other terms cited are contemporary expressions used regularly in the text without much explanation. It was scarcely necessary for the translator to follow this practice, though accurate translation of these terms would in many instances require small modifications of particular sentences. "Finance" is a loan on collateral security, commonly to some prince or municipal corporation. The "deposito" is a loan based on a promissory note for the period between two fairs in the same town. The "ricorsa" bill is a re-exchange, real or ficticious, commonly the latter. Careful handling of these and related problems would have made the translation more comprehensible than the original, but in their present form the general chapters are obscure and difficult.

Some portions of the original text have been omitted. The chapters excluded are not less important than others that have been translated. One contains much general material on the business organization of the financial companies: there are interesting details on capitalization, profits, relations with each other in syndicates, and their relations to the public. The other omitted chapters cover the Genoese financiers, who rose to power when the influence of the Fugger declined; the state bankruptcies of the sixteenth century in Spain; crises in France and the Netherlands; the fairs in Spain, Genoa, and Frankfurt; the decline of Antwerp and Lyons. This material is in no way inferior in quality, nor without its contribution to the general conclusions. The decision to omit this material was most unfortunate.

Abbott Payson Usher

FAY, C. R. *Great Britain from Adam Smith to the present day.* (New York: Longmans, Green. 1928. Pp. xii, 458. $3.75.)

This volume departs from the selection and arrangement of material that has become common in writing on economic history. It begins with a substantial sketch of fiscal policy and finance from Walpole to Lloyd George, and concludes with an excellent discussion of social conditions, social policy, and social legislation. Matters of public policy are thus made the primary feature of the volume; and the description of trade, transport, agriculture, and industry is given a subordinate position. The plan of the volume is admirable, and the work as it stands is suggestive and significant; but it does not adequately convey the full quality of the author's knowledge and insight. A mature reader, familiar with some considerable portion of the literature of the period, will undoubtedly appreciate the quality of judgment and the new syntheses that distinguish the book. The younger student will hardly be able to grasp the full significance of the author's interpretation. For such readers a larger scale of presentation is necessary.

On account of the severe limitations of space at the disposal of the author, one hesitates to criticize the content of the text. It is unfortunate that brevity of statement leaves us with such a conventional treatment of the relations of Peel, Cobden, and Gladstone to the reform of fiscal policy. The status of the issue in the Tory party in Peel's time was more complex than one would gather from the text; and there is need of reëxamination of the older version of Cobden's influence, both in relation to the repeal of the Corn laws and with reference to the treaty of 1860. The part played by Chevalier in the negotiation of the treaty was underestimated by Morley, and the depth of Peel's personal belief in the Corn laws is probably exaggerated in the older accounts. In the present text, many important matters are left to inferences. The delicate problems of this critical period deserved a little more space.

Whether from lack of space or of deliberate purpose, little attention is given to the relations between England and the continent, though the varying stress of industrial competition is clearly of importance in the development of policy. The economic problems of the present century are briefly but vigorously sketched in respect of the domestic situation; but the change in the international position of England's industries is not clearly brought out.

The concluding part on life and labor is the best part of the volume—complete and adequate to its purpose in its present form.

ABBOT PAYSON USHER

FIRTH, R. *Primitive economics of the New Zealand Maori.* (New York: Dutton. 1929. $6.25.)

FRIEDRICH, J. *Das internationale Schuldenproblem. Probleme des Geld und Finanzwesens,* edited by B. MOLL, Band VII. (Leipzig: Akademische Verlagsgesellschaft. 1929. Pp. xiii, 352. M. 15.)

GREENBIE, S. *Frontiers and the fur trade.* (New York. John Day. $3.75.)

GRAHAM, H. G. *The social life of Scotland in the eighteenth century.* (New York: Macmillan. 1928. $2.40.)

HAAS, H., OTT, R. and HOLZMANN, W. *Auslandsanleihen und Reparationen.* Heft VII. (Jena: Fischer. Pp. x, 256. Rmk. 11.)

HARTLEY, D. and ELLIOT, M. M. V. *Life and work of the people of England: a pictorial record from contemporary sources: the fourteenth century.* (New York: Putnam. Pp. 183. $2.50.)

HAYWOOD, B. *Bill Haywood's book: an autobiography.* (New York: International Pubs. $3.50.)

JOSSE, P. *La décadence économique et sociale de le France sous le régime radical-socialiste et les progrés de l'étranger: un bilan tragique.* (Paris: A. Fayard & Cie. 1928. Pp. 330.)

KITTO, F. H. *The Hudson Bay region.* (Ottawa: Dept. of the Interior, Natural Resources Intelligence Service. 1929. Pp. vii, 50.)

LONG, H. *Kingsport. A romance of industry.* (Kingsport, Tenn.: Sevier Press. $2.50.)

LÜTGENS, R. *Allgemeine Wirtschaftsgeographie. Einführung und Grundlagen.* (Breslau: Ferdinand Hirt. 1928. Pp. vii, 215. R.M. 8.50.)

LUTHER, H. *Versuch einer gemeinverständlichen Darstellung unserer Lage in der Weltwirtschaft.* (Berlin: Georg Stilke. 1928. Pp. 126. R.M. 3.)

MACKENZIE, R. D. *L'évolution économique du monde.* (Boulogne-sur-Seine: Imprimerie d'Etudes Soc. et Pol., 26 Rue du Port. 1928. Pp. 118.)

MCWILLIAMS, M. *Manitoba milestones.* (Toronto and London: J. M. Dent & Co. 1928. Pp. xiv, 249.)

This volume includes a hurried survey of the early history of Manitoba and a more detailed description of its growth after 1850. The latter section has much valuable information to the economist on the opening of transportation to St. Paul and to the South; railroad construction; settlement; the export of wheat and wheat pools; real estate speculation; municipal growth; and mining. The reproduction of rare prints and graphs and tables illustrating the economic development of the province are of special value. H. A. I.

MAIRS, T. I. *Some Pennsylvania pioneers in agricultural science.* Pa. State College studies in agric. no. 1. (State College, Pa.: Pennsylvania State College. 1928. Pp. 185.)

MAYER, T. *Deutsche Wirtschaftsgeschichte des Mittelalters.* (Leipzig: Quelle & Meyer. 1928. Mk. 1.80.)

MEAKIN, W. *The new industrial revolution.* (New York: Brentano. $3.)

MESS, H. A. *Industrial Tyneside. A social survey made for the Bureau of Social Research for Tyneside.* (London: Ernest Benn. 1928. Pp. 184. 10s. 6d.)

MITCHELL, B. *William Gregg, factory master of the old South.* (Chapel Hill, N.C.: University of N.C. Press. 1928. Pp. xi, 331.)

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Weil, F. and Bacher, F., editors. *Die Wirtschaft der Tschechoslowakei 1918-1928.* (Prague: Verlag der "Wirtschaft." 1928. Pp. 96.)

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Commerce and economic resources of our outlying territories and possessions. Territory of Alaska, Territory of Hawaii, Philippine Islands, Porto Rico, Virgin Islands, Guam, American Samoa, Panama Canal Zone. (Washington: Chamber of Commerce of the U.S. 1929. Pp. 60.)

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Life and work of the people of England: a pictorial record from contemporary sources: the seventeenth century. (New York: Putnam. Pp. 185. $2.50.)

Report on current economic conditions. Memorandum no. 13. (London: Royal Economic Society. 1929. Pp. 26.)

Die Wirtschaft des Auslandes, 1900-1927. Einzelschriften zur Statistik des Deutschen Reichs, Nr. 5. Prepared by the German Government Statistical Office. (Berlin: Reimar Hobbing. 1928. Pp. viii, 910.)

This volume is a compilation and analysis of the economic development during this century of 44 major countries of the five continents. The material is gathered from the official publications of these countries and from trade and scientific journals, and is prepared for the purpose of assisting German industry and commerce to discover and adjust to foreign production and markets. It contains many tables and charts covering the subjects discussed, together with analyses of their significance for Germany.

The opening study concerns Great Britain. It is one of the fullest discussions, beginning with indices of the economic development as shown by the population, cultivated land, agricultural products, industrial products, transportation and trade and money market. It shows the growth and movement of population and its occupational classification. In many tables, it covers such matters as the cultivation of land; agricultural products; fishing; and the production, use and export of coal, automobiles, iron and steel, electrical equipment, machinery, textiles and chemicals. It discusses British commerce in relation to Germany and to world trade. It analyzes the labor market, especially unemployment by industries, unemployment insurance, industrial disputes, and weekly wages set by the trade boards. It publishes the indices of wholesale prices and of cost of living, as well as data on the money market, the stock market, the exchange value of the pound, foreign capital held in England, and on government expenditures and income, including the rate of the income tax.

In general the same topics are covered with more or less detail in the other countries. The analysis of France lays special emphasis upon the relation of agriculture to industry and commerce in that nation. It includes discussion of production in and trade with the colonial possessions. Particular attention is given to the export of Switzerland's finished products and to Italy's emigration. Russia is treated in as much detail as Great Britain. Labor conditions; the state of agriculture and the growth of use of agricultural machinery; and the production of oil, iron, manganese, electrical power and chemicals are stressed. Many of the Balkan States are treated. Analysis of the United States begins with discussion of our share in the production of the world's important raw materials and our position in world commerce and finance. The growth of our major industries during this century is set forth. Canada, Mexico and the important

South American countries are included. Asiatic countries, and islands, Australia and Africa are covered with more or less detail.

While designed primarily for the practical purpose already stated, this volume is a convenient source of an enormous amount of information, which is compiled with great thoroughness. The sources of information for each country give a good bibliography of their official and technical publications. The book is conveniently arranged and well indexed, so that, in spite of the quantity of material, it is easy to use as a reference.

MOLLIE RAY CARROLL

Agriculture, Mining, Forestry, and Fisheries

Tree Crops: A Permanent Agriculture. By J. RUSSELL SMITH. (New York: Harcourt Brace. 1929. Pp. xii, 333. $4.00.)

This is a more pretentious book than the modest title would seem to indicate. In fact, it is a plea for a new agriculture, for raising crops of trees. It is written with the intensity of a crusader and with the stirring pen of a capable and experienced journalist. I fear, however, that the book will evoke much scepticism among economists and will only slightly impress the scientist. It is not that the book does not contain useful and practical suggestions, but that it claims too much and dismisses too lightly the economic and scientific difficulties of the problem. In spite of all this, however, it cannot fail to have a stimulating influence on those who think seriously of how to prevent the washing away of soil from our hilly farms.

The plan is very simple in its concept. Present-day farming on sloping land results in washing away of soil and destroying the fertility of the land. In place of crops that require tilling, Professor Smith advocates tree agriculture which does not involve tilling; the growing of trees, such as chestnuts, oaks, hickories, persimmons, mulberries, and a host of others, which can produce great forage crops and also food for man. From all parts of the world and even from the past history of the human race, he brings evidence of the important rôle which certain trees play as sources of food for men and animals.

By far the best and most convincing chapter of his entire book is the one in which he discusses the menace of erosion. That washing away of the soil in this country is a most serious menace, no one disputes for a moment. That prevention of erosion is one of the biggest problems today is also universally admitted. And there is no denying that not enough is being done by our various departments of agriculture in stopping erosion of the soil, "the basis of civilization and of life itself."

When, however, Professor Smith advocates tree agriculture in place of our present agriculture as the panacea, the cure-all, not only of this soil-destroying hill farming but also as a means of meeting the threaten-

ing shortage of wood, solving the problem of crop production on arid lands, preventing floods, aiding navigation, facilitating water-power development, and increasing the world's food supply, we may well pause before accepting his thesis in its entirety. It sounds like a page taken out of the early propagandist forest literature.

Soil wastage must be stopped, and the growing of nut trees may conceivably play a part in any measures directed against this evil. It is not so much the lack of knowledge of how to till sloping land to prevent erosion and absorb all the water, as to make the farmers see the advantage of such method of cultivation. Terracing of such land has been shown to be a very effective means against washing away of soil. The building of some very simple dams in cases of advanced gullying is also a tested, practical means. Maintaining the slopes in timber growth is a universally recognized preventive against soil erosion. The use of orchards, provided they are not tilled and the rest of the land is covered with heavy sod, will also prevent washing away of soil. Even sodding alone, although it may not help the absorption of rain water, will keep the soil in place. It is even conceivable that the planting of nut trees, the fruit of which can be gathered within a comparatively short time after the orchard is established, may be more attractive and have a greater popular appeal than the growing of forest crops. But to do away with one sweep of the hand with present-day farming and to substitute for it tree cropping is to overlook many important economic and scientific facts.

In countries, like Corsica, where tree crops serve in place of agricultural crops, it is usually poor man's agriculture. It is an agriculture based on ownership of the same parcel of land for many generations. It is an agriculture based largely on manual labor, that does not know the application of power machinery. To transfer such a type of agriculture to the United States would mean almost an economic revolution in ownership, character of farming, and in the whole economic fabric of our industrialized country. With our rapidly increasing tenancy, it is difficult to interest the tenant in maintaining the fertility of the land, let alone planting it to nut orchards. The over-production of food crops (this may co-exist with under-consumption) is universally admitted to be one of the ills from which the farm industry is now suffering. The immediate problem is not to increase the food supply, but to place agriculture on a more profitable economic basis from the standpoint of the producer.

We have in this country good examples of nut orchards, for instance, the pecan industry. Yet, the possibility of over-production even in this industry is only too manifest. The production of nuts as a forage crop or food for man, if it is to be on a commercial basis, must com-

pete with the production of other staple food products. It would mean intensified cultivation. It would mean in many cases *cultivation* of the orchards. Leaving the orchard trees to grow up wild, without care, would be a very poor and expensive substitute for intensive agriculture.

Among the scientific difficulties that are being minimized is that of breeding up the right kind of tree crops for our great variety of climate and soil. When one looks back into the history of wheat growing and corn cropping in this country, what a long and costly process it was to find just the right varieties suitable for regions with dry summers and for those with early or late frosts. And the hosts of insects and diseases that prey upon the tree crops! This is a barely touched field. The chestnut has been practically wiped out by disease of which, in spite of much effort and great expense, nothing definite has yet been learned. By the time we may develop some tree crops and know how to protect them against their natural enemies, there is danger that there may be no soil left to protect from washing.

Yet, we must not overlook a single bet. The threat of soil erosion is too great. There may be conditions where tree cropping can serve to good advantage for utilizing slopes without wastage of the soil, and experiments in that direction are most needed. Tree crops may have a place in the battle against this menace. But to depend upon them alone would be too risky and too uncertain under our present economic conditions and present knowledge of tree crops suitable for our hilly farms.

The book is profusely illustrated and leaves nothing to be desired from a book-making standpoint. It contains a great deal of practical information on certain kinds of trees capable of producing forage and human food. It is a stimulating book for a discriminating reader.

RAPHAEL ZON

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The Grain Trade During the World War. Being a History of the Food Administration Grain Corporation and the United States Grain Corporation. By FRANK M. SURFACE. (New York: Macmillan. 1928. Pp. xxviii, 679. $6.00.)

This book discusses one of the most interesting experiments in public operation of food distributive systems during the World War. Its purpose, in the words of the author, "is to place on record a discussion of the policies and accomplishments of the Food Administration Grain Corporation and its successor, the United States Grain Corporation, in carrying out the mandates of Congress regarding a guaranteed price of wheat and in providing an adequate supply of cereal foods for ourselves and the allied nations. It is the story of a gigantic organiza-

tion, based on sound commercial principles, which during the thirty-three months of its active existence, handled a total commodity turnover, including the value of both purchases and sales, in excess of $7,500,000,000." The discussion falls into two parts, the first part dealing with the operations as a whole and the administrative set-up, the second part presenting various problems of administration and the policies adopted to handle them.

The method of presentation is descriptive and historical. The attitude of the food administration toward public control of foodstuffs and the reasons for the policies adopted are given without any discussion of the economic philosophy or political consequences of public operation. It is a record of what was accomplished in controlling the production and distribution of wheat in a national crisis; and its chief significance is its usefulness as a guide for handling similar future emergencies in the distribution of food.

Some good illustrations of the many difficult problems that unexpectedly arise when an existing economic system is suddenly superseded by a new organization, might have been drawn from the discussion. In the case of wheat control, the location of stock was discovered to be such an important factor affecting price that the maintenance of a price for this grain was likely indirectly to be a price factor for other grains which required the same kind of handling facilities. Then there were also the legislative-political difficulties of establishing a price policy, fixing and enforcing handling margins when private enterprise supplements governmental activity and many other problems which arise from the complexity of modern industry and the far-reaching ramifications of any part of it. These applications of our war-time experience to conditions of peace are left to the reader, however, and perhaps wisely, because of the difficulties of comparisons which involve such different settings as peace and war.

A good deal of emphasis is placed upon the need for federal control of a basic food, as wheat, in order to avoid chaos which might easily accompany unbridled speculation. The corner of May wheat futures at Chicago in 1917 and subsequent action by the Chicago Board of Trade in demanding an equitable settlement among dealers is pointed to as an example of what frenzied speculation may do in times of world-wide stress and shortage of foodstuffs. Widely different reactions to this part of the discussion are likely to be formed by readers, depending upon their economic philosophy and their experience with war-time control. Some will insist that the need for national control in an emergency such as existed in 1917 is so obvious as to need no proof. Others will insist that the gains from stabilization are easily exaggerated and that too much reliance is placed upon data presented

to show reductions in marketing margins (as on p. 82). However, when one considers the book from the point of view of future generations, the frequent reference to and repetition of this aspect of the discussion seems warranted; and as for the proof, it seems adequate in spite of the limitations of the supporting data.

The sections dealing with financial operations of the Grain Corporation are brief but comprehensive. A turnover of 7½ billion dollars by an international marketing organization conducted at a cost of 89 cents for each thousand dollars of product, and handled in such a manner as to reimburse the federal treasury for interest on capital advances as well as principal and still show an operating profit, provides the basis for an impressive story of great achievement in public service.

Other interesting organization and operating problems might be mentioned, but space does not permit. Control of the export trade, coarse grains and cereals, transportation, legislative activity and farm marketing are some of the topics given special consideration. The documentary evidence presented unfortunately detracts from the narrative style adopted in the text, although most of it can be easily omitted without destroying the sequence of the discussion. At the same time its inclusion adds authenticity to the discussion as well as an additional interest to readers who are interested in the historical aspects of the subject. An appendix of 165 pages contains additional documentary materials including acts and resolutions of Congress pertaining to the Grain Corporation; proclamations and executive orders; agreements, memoranda, letters, etc.; statistical and report forms; a complete list of Grain Corporation personnel.

Students of government as well as economics will find this book a helpful reference. Political partisans will discover much information to support or detract from their theses depending upon whether they are true or false.

The book is a companion to the *Stabilization of the Price of Wheat during the World War*, reviewed in the March, 1926, issue of the AMERICAN ECONOMIC REVIEW, and does not duplicate the discussions in the earlier publication.

H. BRUCE PRICE

University of Kentucky

Practical Coöperative Marketing. By A. W. McKAY and C. H. LANE. (New York: Wiley. 1928. Pp. xvii, 512. $3.00.)

According to the preface, McKay and Lane had two conflicting purposes in mind when they wrote this volume. First, they state: "It is prepared essentially to meet the needs of students of vocational agri-

culture in schools"; and second: "These headings (questions raised in Part 3) are for the most part in the form of questions which a farmer may ask himself regarding the association of which he is a member, or is about to become a member." In other words, they are going to write a book which soundly and authoritatively presents the fundamental problems connected with coöperative farm marketing in order that the student of this subject may draw his own conclusions relative to such a system *and at the same time* assist those who assume that this method has justified itself because there appears to be so much of it, and who therefore want to learn the best technique in proceeding with the organization and operation of a given association.

It is to be regretted that the book itself shows the effect of the second purpose and not the first. It is, in reality, a handbook for coöperators, not students of coöperation. It is true that in Part 1 there is one chapter on "Services coöperative associations can perform." The authors realize that "associations cannot sell at an arbitrary, predetermined price. . . . ." But they apparently have not crystallized in their own minds the sound foundation upon which a successful coöperative can be built; for they conclude (page 25): "Coöperative associations, therefore, have been active in developing methods for eliminating losses and excessive marketing costs." A much more thorough statement will be found in the recent report of the Federal Trade Commission, page 299.

Even in the matter of aiding a coöperator or imminent coöperator, the book could show improvement. The main body of the book contains interesting information about the coöperative marketing of different products, the organization of one association being used as an example in each case. The real value of the work as a handbook, however, should be found in Part 3, in which each chapter considers one question, such as, "Does the association meet an economic need?" "Is the association soundly organized?" and "Is the association guided and supported by its members?" These are important questions to the coöperator. The answers to them should be given in detail and in such a manner that the necessary action which should result in each case becomes evident. Such is not the case. In connection with "Does the association meet an economic need?" the authors raise 7 points: (1) Handling and marketing practices may be inefficient; (2) local handling and marketing charges may be excessive; (3) farmers may not receive full value for first-grade products; (4) market outlets may be uncertain; (5) increased production may necessitate larger markets; (6) demand for a product may be limited; and (7) prices may be low, or may fluctuate widely. Methods of meeting these problems of the farmer are not given and the reader is left with the impression that the

organization and operation of a coöperative association is necessary and is the only agency which will and can meet them.

The illustrative material is taken largely from the publications of the United States Department of Agriculture. The general treatment of the subject, in much the same manner as that followed by too many other writers in the same field, is a disappointment. Not enough of the propaganda of enthusiastic coöperators has been removed from the thoughts of the writers to make the volume of the utmost value to coöperating farmers, to say nothing about the student seeking the solution of agricultural problems.

WILFORD L. WHITE

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Agrarpolitik. By FRIEDRICH AEREBOE. (Berlin: Paul Parey. 1928. Pp. ix, 619. R.M. 23.)

This new volume on German agrarian policy by Professor Aereboe is of outstanding importance. The book is divided into two principal parts: the first outlines the economic foundations of a sound agrarian policy, and the second takes up important present-day problems relating to population, distribution of land, rural education, taxation, tariff duties, credit, farm labor, land settlement and rural reorganization. The point of approach differs widely from that of most writers on the subject, reflecting the experiences and convictions acquired during the long life of the author as an outstanding leader in the practice and science of agriculture. He does not lose sight of the social point of view, but his approach to the social point of view is by way of the individual. He concludes after a thorough business analysis of farming that the "Bauer," the owner-operator on the family farm, is the ideal of an agricultural entrepreneur, who contributes most to productive and efficient farming.

If the rate of progress in agricultural production is slow, it is due to the lagging education of the small farmer, whose knowledge does not follow closely enough the advancement of technique and science. More training, better training and more diffused education will serve to replace the aristocracy of birth and money by a new democracy in which superior intellect and ability furnish the leadership. A radical modification of the existing distribution and heredity of land is needed. Under the present system, there are only three possibilities for a growing rural population; increase of dependent farm labor, migration and flight to the cities and emigration abroad. Aereboe recommends strongly the parcelling out of all large estates, not in a compulsory way, but by the free and unrestricted play of economic forces. He insists upon a strict enforcement of the federal laws, abolishing all

legal privileges given to the large estate holder under the social order of the past.

Aereboe sees in taxation reform another central problem in the program of rural reconstruction. He challenges the present system of income taxation as one of the worst enemies of family farming. Large estates have been able to escape a crude income taxation by a corrupt method of self-assessment. With the small farmer the income tax has become virtually a property tax. The solution is the development of a general land tax, with a progression based on the productive capacity of the soil, and further taxation of inherited wealth. Naturally, there will be severe criticism of these proposals, as there were some ten years ago when a similar rural taxation program was developed under Professor Aereboe's inspiration. In a mistaken policy of increased sugar taxation the author sees discrimination against small-scale, intensive farming. Alcohol taxation should be increased considerably to release sugar beet production from undue pressure of taxation and limit further expansion of the potato output.

In his theory of foreign trade, the author accepts the essential soundness of the principle of comparative advantage and the beneficial effects of free trade. But since there is little tendency now toward the goal of international division of labor, he favors protection of all products of the dairy, poultry and livestock industries and truck farming, and free trade in grain and concentrated feeds. Again the leading thought is protection and relief for small-scale family farming.

Aereboe also provides a place for market and price analysis, for outlook work and a further development of the market reporting system. Discussion of rural credit organization distinctly shows the author's intimate acquaintance with the financial problems of the farmer and his wide experience with the workings of rural credit institutions. He blames unsatisfactory appraisal methods for an unjust distribution of credit. Mortgage credit is to be looked upon as the basic type of agricultural credit, represented best by the "Pfandbrief" system. The vendibility of this paper makes mortgage credit flexible and adapts it to the various needs of the farmer. Aereboe is a warm intercessor for coöperative credit organization as a considerable aid for the solvency of the small farmer. Reform is also needed in the policies regarding hired farm labor. Increased wages and opportunities for land settlement must keep open the agricultural ladder.

There will doubtless be disagreement with some of the proposals made by the author. The theoretical economist will find weak points in the meager discussion of value and price, in the exposition of the theory of rent, in the incomplete statement of the principle of diminishing returns, on which Aereboe's theory of intensity is based. There

also will be much bitter resentment against his truthful but pitiless criticism of institutions. But there is no mistaking the keenness and genuineness of his understanding and sympathy. No one in any way interested in German agricultural policy will be able to overlook this remarkable contribution of the recognized master of farm economics in Germany to the literature of the field.

KURT SCHNEIDER

University of Bonn

NEW BOOKS

BLACK, J. D. *Measures for farm relief.* (New York: Holt. $3.)

BLUNDELL, F. N. *The agricultural problem.* (London: Sheed & Ward. 1s.)

BOYLE, J. E. *Marketing Canada's wheat.* (Winnipeg: Winnipeg Grain Exchange. 1929. Pp. 63.)

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BROWN, H. P. *Atlas of the commercial woods of the United States.* (Syracuse, N.Y.: Author. 1928. Pp. 6, pl. 60.)

CAMERON, J. *The Bureau of Biological Survey: its history, activities and organization.* Service monographs of the U. S. govt., no. 54. (Baltimore: Johns Hopkins Press. 1929. Pp. x, 339. $2.)

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CLEMEN, R. A. *The possibilities of developing new industrial markets for farm products.* Circular 330. (Urbana: Univ. of Illinois, Coll. of Agric. 1928. Pp. 24.)

COPLAND, D. B., editor. *Australian wool annual.* Vol. I. *1927-1928.* (Melbourne: Robertson & Mullens, 103 Elizabeth St. 1929. Pp. 120. 17s. 6d.)

Since the United States consumes one-sixth of the world's wool supply and produces approximately one-tenth, it is dependent upon other countries for a considerable portion of its raw material for wool manufacture. For wearing apparel somewhere near forty per cent of the wool consumed must be imported, and of this amount more than one-third is produced in Australia. This southern continent not only provides us with millions of pounds of wool but sells to all parts of the world. It produces about one-quarter of the world's wool supply. It will be easily understood, therefore, why members of the industry welcome data concerning Australian wool. For the student of the wool industry statistical data of Australia are already available as published in the *Official Year Book of the Commonwealth of Australia* and issued commercially by Australian firms. Professor Copland, of Melbourne University, however, presents in the volume under discussion not only data but their interpretation and analysis. The volume will appeal to wool grower, merchant and manufacturer as well as to economist and layman. Printed in quarto size it contains one-hundred twenty pages, well illustrated with excellent half tones. It opens with a thoughtful foreword by Sir George Fairbairn and

"What the wool industry means to Australia" by the Right Honorable S. M. Bruce, P.C., Prime Minister of Australia.

Dr. Copland contributes two articles, "The world supply and demand for wool" and "Marketing of wool in Australia." H. E. Teare of the Alexander Hamilton Institute of Australia discusses analytically, with the aid of tables, charts and graphs, "Wool prices: influences affecting them." G. L. Wood, M.A., University of Melbourne, is credited with a paper upon "The expansion of the pastoral industry in Australia" with maps and particularly attractive illustrations. Henry Barkley of the Commonwealth Meteorological Bureau, discusses weather factors, of such vital concern to wool growing in Australia. A less technical but a topic of great interest is "Life on an Australian sheep station," written by W. M. Webb. "Australia: home of the merino sheep" by A. F. Hooper of Goldsbrough, Mort & Company, with an outline of the origin and development of his house, completes the publication.

WALTER HUMPHREYS

DRON, R. W. *The economics of coal mining.* (New York: Longmans Green. London: Edward Arnold & Co. 1928. Pp. vii, 168. $4.20.)

ERDMAN, H. E. *American produce markets.* (Boston: D. C. Heath. 1929. Pp. xiii, 449. $3.40.)

FILLEY, H. C. *Coöperation in agriculture.* (New York: Wiley. 1929. Pp. xix, 468. $4.)

GRANOVSKY, A. *Les problèmes de la terre en Palestine.* (Paris: Cahiers Internationaux, Les Editions Rieder. 1928. Pp. 226. 12 fr.)

GREENWOOD, E. *Prometheus, U.S.A.* (New York: Harper. 1929. Pp. xvi, 213. $2.50.)

A vivid and popular account of the various uses and types of fuel which have contributed to the progressive advance of civilization. Brief chapters treat of the history of wood, gas, and oil fuels, followed by more detailed descriptions of modern inventions based upon the use of oil.

HITCHCOCK, J. A. *Cost and profit in the sugar orchard.* Bull. 292. (Burlington: Vermont Agric. Experiment Station. 1929. Pp. 19.)

———. *Economics of the farm manufacture of maple syrup and sugar.* Bulls. 285 and 286. (Burlington: Vermont Agric. Experiment Station. 1928. Pp. 96, 24.)

KING, C. L., editor. *Farm relief.* Annals, vol. CXLII, no. 231. (Philadelphia: Am. Academy of Pol. and Soc. Science. 1929. Pp. viii, 479.)

KIRKPATRICK, E. L. *The farmer's standard of living.* (New York: Century. 1929. Pp. 312. $2.)

LACY, M. G., compiler. *Agricultural economics: a selected list of references.* Agric. econ. bibliography no. 1, rev., 1929. (Washington: Supt. Docs. 1929. Pp. 18, mimeographed.)

McGILL, N. P. *Children in agriculture.* Pub. no. 187. (Washington: Supt. Docs. 1929. Pp. v, 81. 25c.)

MONTGOMERY, R. H. *The coöperative pattern in cotton.* (New York: Macmillan. 1929. Pp. xviii, 335. $2.50.)

MOORE, E. S. *Canada's mineral resources.* (Toronto: Irwin and Gordon. 1929. Pp. xv, 301.)

This is the first standard and authoritative volume to appear on the present mining development of Canada. It discusses each of the metals

and non-metals with reference to geology, deposits, production, and distribution in each province. The whole is based primarily on government reports and includes a valuable bibliography on each metal and for each province, numerous maps and an index. H. A. I.

O'Brien, G. *Agricultural economics.* (New York: Longmans Green. 1929. Pp. viii, 195. $4.20.)

Phipps, H. M., editor. *Financial farm—industrial relief: the solution of financing of America's basic industry, equalizing the range between the producer and consumer, and destroying the speculative price range of the middle man, and establishing staple values to both producer and consumer upon the true supply and demand principle.* (Chicago: Clarke-McElroy. 1928. Pp. 108.)

Sampson, A. W. *Livestock husbandry on range and pasture.* (New York: Wiley. 1928. Pp. 411. $4.50.)

Sawer, E. R. *The restoration of Palestine's hill country.* Address to the Palestine Economic Society, Oct. 25, 1928. Agricultural leaflets, ser. VIII, Afforestation. (Jaffa: Dept. of Agriculture, Forests and Fisheries. 1929. Pp. 23.)

Seligman, E. R. *The economics of farm relief.* (New York: Columbia Univ. Press. $3.)

Sherman, W. A. *Merchandising fruits and vegetables: a new billion dollar industry.* (Chicago and New York: Shaw. 1928. Pp. xv, 499. $4.)

Author is chief marketing specialist in the federal Bureau of Agricultural Economics at Washington. The early historical evolution of the marketing of perishables is described, followed by chapters on the revolution created by the use of artificial ice; the hazards of the industry; banking relationships; influence of coöperative organization; marketing through factories; canning; governmental supervision; inspection at shipping and terminal points; market news service; marketing methods, and the problem of trade surpluses.

Sims, N. L. *Elements of rural sociology.* (New York: Crowell. Pp. 698. $3.75.)

Smith, B. B. *Factors affecting the price of cotton.* U. S. Dept. of Agric., technical bull. no 50. (Washington: Supt. Docs. 1928. Pp. 75. 15c.)

Tannenbaum, F. *The Mexican agrarian revolution.* (New York: Macmillan. $2.50.)

Thom, W. T., Jr., *Petroleum and coal. The keys to the future.* (Princeton: Princeton Univ. Press. Pp. 223. $2.50.)

Voskuil, W. H. *The economics of water power development.* (Chicago: Shaw. 1928. Pp. 237. $3.)

Widtsoe, J. A. *Success on irrigation projects.* (New York: Wiley. 1928. Pp. v, 153. $1.75.)

The author briefly describes the historical development of irrigation in the United States, giving special attention to the period of federal reclamation. He discusses the factors which underlie successful irrigation—an ample water supply, good soil and proper climatic conditions. He lays particular emphasis on the social and economic aspects, the importance of social organization, coöperation, and he claims high moral qualities for people on irrigated land. Because the costs of bringing land

into productive use by irrigation are so high, a knowledge of the technique of irrigation farming, considerable capital, and a right attitude toward rural life are essential to success. Selection of settlers and technical advice on the part of the government are advocated as well as a system of repayment for construction costs suited to irrigation. The author believes that the government is justified in permitting the settler to pay for the construction costs over a long period of time, and without interest. Since private individuals must have interest, he concludes that "reclamation of arid lands by irrigation becomes a government function" (p. 88). He is a firm advocate of the continued reclamation of the arid lands in order to develop the land resources of the nation, and to supply us with bread. He considers the type of civilization developed under conditions of irrigation a "leaven of righteousness and success." "From this point of view alone, the world is justified in building largely and well irrigation structures to reclaim the rainless areas of the earth" (p. 127).

He does not mention the relation of irrigation at public expense to the present agricultural surplus; nor does he answer the objections raised by R. P. Teele, in his *Economics of Land Reclamation.*

George S. Wehrwein

Wiecking, E. H. *The farm real estate situation, 1927-28.* U. S. Dept. of Agric., circular no. 60. (Washington: Supt. Docs. 1928. Pp. 64. 10c.)

Agricultural and pastoral production of the Dominion of New Zealand for the season 1927-28: statistical report. (Wellington: Census and Statistics Office. 1928. Pp. xvi, 59. 2s. 6d.)

American Iron and Steel Institute: annual statistical report for 1927. (New York. Am. Iron and Steel Inst. 1928. Pp. vi, 119.)

Dominion Fuel Board: second progress report, 1923-1928. (Ottawa: H. M. Stationery Office. 1928. Pp. 57.)

Investigations of mineral resources and the mining industry, 1927. No. 694. (Ottawa: H. M. Stationery Office. 1928. Pp. iv, 45.)

The Jewish Agricultural Society, Inc. Annual report. (New York City: Jewish Agric. Soc., 301 E. 14th St. 1928. Pp. 36.)

Mineral industry of Alaska in 1927, and administrative report. Geological bull. 810-A. (Washington: Supt. Docs. 1929. Pp. 85. 15c.)

Mutual irrigation companies. U. S. Dept. of Agric., technical bull. 82. (Washington: Supt. Docs. 1929. Pp. 51. 10c.)

The production of sulphate of ammonia in 1927. No. 61. (New York: Barret Co., 40 Rector St. Pp. 18.)

Statistics relative to the dairy industry in New York State, 1927. Agric. bull. 214. (Albany: N. Y. Dept. of Agriculture and Markets. 1928. Pp. 116.)

Vocational education in agriculture, 1917-1927: review of progress in vocational agriculture for the 10-year period. Federal Board for Vocational Education, bull. 134. (Washington: Supt. Docs. 1928. Pp. 40. 10c.)

Wheat studies. Vol. IV, nos. 1-10. No. 1, *The world wheat situation 1926-27.* No. 2, *Statistics of American wheat milling and flour disposition since 1879.* No. 3, *Survey of the wheat situation, August to November, 1927.* No. 4, *Disposition of American wheat since 1896 with special reference to changes in year-end stocks.* No. 5, *Rye in its relations to wheat.* No. 6,

Survey of the wheat situation, December, 1927, to March, 1928. No. 7, *The objectives of wheat breeding.* No. 8, *British parcel prices.* No. 9, *Ex-European trade in wheat and flour.* No. 10, *Survey of the wheat situation, April to July, 1928.* (Stanford University, Calif.: Food Research Institute. 1927, 1928. Pp. 1-390.)

No. 1, a review of the crop year 1926-27, discusses two points of particular interest to those studying wheat prices. In the fall of 1926 there was considerable current discussion during the English coal strike as to whether the resulting high ocean freights tended to lower United States prices or raise them. Some believed that settlement of the strike and lowering of ocean freight rates would cause increased European demand to such an extent as to advance United States prices higher than they were while the strike was on. Others held to the view that lower Liverpool prices when freights were lowered would lead to lower United States prices. The review of the situation shows that the result of high freights was larger price advances on the English markets than in the United States and a consequent widening of the spread between the two prices to the disadvantage of the European buyer. It also shows, however, that with lower freights and lower prices abroad, United States prices declined in sympathy with foreign prices instead of advancing. The other point of special interest is a discussion of the probable influence of the Canadian Pool on prices. Nos. 3, 6, and 10 of this volume of *Wheat Studies,* being reviews of the current wheat situation, each contain a concluding topic on the price outlook. These forecasts or near forecasts in so far as they commit themselves, have been well borne out by subsequent trends of events.

The rate of decline of flour consumption per capita in the United States since 1904 and valuable data on flour consumption are outstanding features of report No. 2.

Report Number 4 features statistics of changes in year-end stocks of American wheat since 1896. This report is a good critical analysis of data dealing with the determination of the disposal of the United States wheat crop. Among other things, it is shown that surpluses from large crops are absorbed by increased consumption to only a small extent. On the average, about half of the surplus is exported and about half goes to increase year-end stocks or carry-over.

Perhaps the most important analysis in report Number 5 is the section dealing with price relationships of rye and wheat.

No. 7 is an excellent résumé and historical sketch of work in wheat breeding, with special reference to underlying purposes.

No. 8 is an excellent analysis and selection of the actual price series that will best represent the so-called "world price of wheat." British parcels prices are selected as the preferred series. Their desirability over other British wheat price series for short-time analyses, in particular, is pointed out.

The analysis in No. 9 shows the rapidly growing importance of wheat and flour markets outside of Europe, the inability of most of these areas to increase their own wheat production to any extent, and the dependence of volume of trade with these areas more upon variations in their own supplies than upon elasticity of demand.

R. M. Green

Manufacturing Industries

The California and Hawaiian Sugar Refining Corporation of San Francisco, California. A Study of the Origin, Business Policies and Management of a Coöperative Refining and Distributing Organization. By Boris Emmet. Stanford Business Series, No. 2. (Stanford University: Stanford Graduate School of Business. 1928. Pp. xx, 293.)

The California and Hawaiian Sugar Refining Corporation is a refining and distributing company located at Crockett, California, but owned by a group of thirty-three Hawaiian sugar plantations whose output represents about 80 per cent of all the raw cane sugar produced in Hawaii. The company did a volume of business of about eighty millions during 1927 which is eight and one half times the amount done in 1906, the first year of operation. Due to the size of the organization together with the real amount of success attained, this company presents the opportunity for an excellent case study of business organization and management problems and methods.

After a brief review of the history of the company and a statement of its capital structure and general character, the discussion follows the lines of major company division; *viz.*, the refining, sales, finance and accounting divisions. For each division there is an intensive analysis of divisional and departmental organization, and of planning, controlling and operating technique. The entire study gives evidence of an unusual amount of coöperation on the part of company officials, making it possible to go beyond general statements to the presentation of a tremendous amount of supporting data. For instance, when discussing budgeting procedure Professor Emmet was able to add tables comparing production, sales, money expenditure and unit cost estimates with actual accomplishment for the time period.

There is much specific information in this volume for three groups, in addition to the business organization and management groups. First, teachers of marketing and sales management will find the sort of information often desired, yet rarely available, in the chapter on the sales division and in the concluding chapter. For instance, the degree of current hand-to-mouth buying is shown definitely by a decline of average tonnage per invoice from 13.3 to 9.0 since 1923. The costliness of expanding beyond the "natural" market is indicated by the fact that the total cost in the east is 3.8 times as great as on the coast. Although the general costs have declined perceptibly in proportion to the increase in volume, sales costs have increased due to the complications of hand-to-mouth buying and extension of selling territory. There is specific information, too, with respect to the relative

shift from wholesalers and jobbers to chain stores, the amount of and trend in the sale of packaged sugar and the seasonality of the demand for sugar.

Second, the labor economist will find much meat in the detailed analysis of the work of the industrial relations department to which forty-five pages are devoted. He will be interested, too, in the last chapter where it is shown that gross labor turnover has been reduced by almost two-thirds since 1923, that percentage average daily increase in labor productivity ranges from 5.95 to 21.69 since 1925, together with data concerning seasonality of employment and the reasons for separation from the company.

Third, the price theorist has available here some valuable cost data. Decreasing cost analysis is illuminated by figures showing the effect of the rate of melt upon unit cost of refining. An effort is made to estimate the effect upon different types of costs. There is an excellent historical analysis of progress in cost reduction as volume of production has increased, again broken down for types of costs as refining, warehousing, selling, administration, general office, legal, commissions and cash discounts, loss in refining, outside operations and miscellaneous.

Professor Emmet's work is bound to have more than sectional appeal due to the international aspects of the operation of the California and Hawaiian Company and the thoroughness with which the study has been presented. Sectionally speaking, however, the Pacific Coast universities will be looking forward to an amplification of the Stanford Business series by the addition of similar studies of other coast firms.

E. T. Grether

University of California

NEW BOOKS

Brown, B. O. *Problems of newspaper publishing, with special reference to the country field, including weekly and daily newspapers.* (New York: Harper. Pp. 389. $3.)

Kuhlmann, C. B. *The development of the flour-milling industry in the United States, with special reference to the industry in Minneapolis.* (Boston: Houghton Mifflin. 1929. Pp. xvii, 349. $3.50.)

Liston, J. *Some developments in the electrical industry during 1928.* Reprint from the *General Electric Review,* January, 1929. (Schenectady: General Electric Co. 1929. Pp. 70.)

Federal Power Commission. Eighth annual report: 1928. (Washington: Supt. Docs. 1928. Pp. iv, 227. 25c.)

A history of the Du Pont Company's relations with the United States government, 1802-1927. Prepared by the Smokeless Powder Dept. (Wilmington, Del.: E. I. Du Pont de Nemours & Co., Inc. 1928. Pp. 120.)

Swift & Company, 1929 year book: covering the activities of the year 1928. (Chicago: Swift & Co. 1929. Pp. 56.)

Union des Syndicats de l'Electricité. Annuaire 1928. (Paris: Union des Syndicats de l'Electricité, 25 Boulevard Malesherbes. 1928. Pp. xv, 1820, 156.)

Transportation and Communication

NEW BOOKS

BERGER, Z. *Die Eisenbahnpolitik der Tschechoslovakischen Republik seit ihrem Bestehen.* Die Volkswirtschaft 1. (Strassburg: Heitz & Cie. 1928. Pp. 142.)

FRANKEL, S. H. *The railway policy of South Africa: an analysis of the effects of railway rates finance and management on the economic development of the Union.* (Johannesburg: Hortors, Ltd. London: P. S. King. 1928. Pp. xvii, 367. 16s.)

This work is a careful study of a complicated and vital subject. It is fully documented from official sources and is permeated throughout by judicial examination and impartial statement. The evils of undue and hampering interference by the government in the railway administration and the abuse of the railways in order to serve conflicting political purposes have reacted disastrously upon both the carriers and the country's economic development. The author's constructive suggestions for improvement are based upon the abandonment of direct state operation, the adoption of a business administration under state ownership, and the constitution of a Railway Rate Tribunal or Commission to deal particularly with the justice or reasonableness of rates and services. The work is completed by a series of appendices and a comprehensive index.

W. T. J.

HENNIG, R. *Abhandlungen zur Geschichte der Schiffahrt.* (Jena: Fischer. Pp. v, 171. Rmk. 9.)

HINES, W. D. *War history of American railroads and war transportation policies.* Am. series of econ. and soc. hist. of the World War, Carnegie Foundation. (New Haven: Yale University Press. $4.)

HUNGERFORD, E. *The story of the B. & O. Railroad, 1827-1927.* Vols. I and II. (New York and London: Putnam. $10.)

JOHNSON, E. R., HUEBNER, G. G. and WILSON, G. L. *Principles of transportation.* (New York and London: Appleton. Pp. xv, 815.)

LOCKLIN, D. P. *Railroad regulation since 1920.* (Chicago: Shaw. 1928. Pp. vii, 211. $2.50.)

PARMELEE, J. H. *A review of railway operations in 1928.* Reprinted from *Railway Age* for January 5, 1929, figures revised to March 1, 1929. Miscellaneous ser. no. 47. (Washington: Bureau of Railway Economics. 1929. Pp. 37.)

STEWART, I., editor. *Radio.* Supplement to Annals, vol. CXLII. (Philadelphia: Am. Acad. of Pol and Soc. Science. 1929. Pp. iv, 107.)

VAN METRE, T. W. *Early opposition to the steam railroad.* (New York: Columbia University School of Business. 1929. Pp. 61.)

WOOD, W. V. and SHERRINGTON, C. E. R. *The railway industry of Great Britain, 1927.* Memorandum no. 11. (London: Royal Economic Society, 9 Adelphi Terrace. 1929. Pp. 27.)

Interstate Commerce Commission Reports, Vol. 142, decisions, April-May, 1928. (Washington: Supt. Docs. 1928. Pp. 900. $2.25.)

Organization of railways: some material published from 1920-1929. (Washington: Bureau of Railway Economics. 1929. Pp. 26, mimeographed.)

The radio industry: the story of its development. (Chicago: Shaw. 1928. Pp. vii, 330. $5.)

This volume is a publication of a series of lectures by leading experts delivered at the Harvard Graduate School of Business Administration in 1927-28. They cover the history of the industry; the law of the air; boadcasting; merchandising of equipment, and the applications of radio principles and devices in industry.

Statistics of railways in the United States for the year ended December 31, 1927: forty-first annual report. Including also selected data relating to other common carriers subject to the Interstate Commerce act for the year 1927. (Washington: Supt. Docs. 1928. Pp. cx, 274.)

Trade, Commerce, and Commercial Crises

NEW BOOKS

ANSTEY, V. *Trade of the Indian Ocean.* (New York: Longmans Green. 1929. Pp. xvi, 251. $3.)

BACHI, R. *La politica della congiuntura. Prevenzione e attenuazione degli effetti delle crisi economiche.* (Rome: Libreria Fratelli Bocca. 1929. Pp. 148.)

WILLIAMS, B. H. *Economic foreign policy of the United States.* (New York: McGraw-Hill. 1929. Pp. xi, 426. $4.)

As to scope, this volume fulfills the promise of its title. By way of introduction, comes a discussion of the place of the economic motive in guiding official action affecting international relations. The body of the work consists of two parts: the diplomacy of investment and the diplomacy of commerce.

Part 1 opens with a chapter on the transition from a debtor to a creditor nation and on the value of external loans and investments from the public standpoint. Then follow two chapters on political encouragement to capital exports, explaining and illustrating the various methods employed by our government and tracing in some detail its efforts in behalf of the export of capital into oil fields. More briefly is considered the development of American policy concerning capital embargoes, especially those prompted by failure to fund war loans, by attempts at raw material monopolies, and by fear of interference with reparations payments. Six chapters are devoted to the protection of American investments abroad. The first of these deals with general principles and with causes and evidences of a stronger stand in recent years. The other five take up at greater length certain specific policies and practices, *viz.,* the due process of law doctrine, anti-revolutionism and the manipulation of governments, financial supervision in the form of customs control, collection of internal revenue, and control of indebtedness and expenditures. Part 1 closes with a chapter on the interallied debts, including criticism of the work of the funding commission and of cancellation proposals.

Part 2 is somewhat shorter. The main topics are: historical aspects of American commercial diplomacy, bargaining tariff laws and reciprocity

agreements, the most-favored-nation clause, the open door and the closed door, shipping policies, and raw materials (general considerations and the contest against restrictions).

In the words of the preface, "The difficult task is here attempted of assembling from a literature that is often filled with partisan criticism and official defense, an objective account of the economic foreign policies of the United States." The task has been well done. The volume is generously documented and shows discriminating use of official and private publications covering a wide range. It is carefully organized and thoroughly readable. It is realistic and fairly critical, but well-poised and unsensational. It should prove serviceable to students and citizens generally, making them acquainted with present policies, with their origins and evolution, and with their larger implications.

The value of the work lies, not so much in originality of thought as in the marshalling of facts and making them conveniently accessible. The method is much the same throughout—a combination of the historical and the analytical. Historical changes of policies are traced mainly to successive shifts in economic interest and especially to the nation's comparatively recent "wholesale participation in the economic affairs of the world." Along these lines are explained reversals of attitude on many problems, *e.g.*, debtor nations, protection of investment, revolutionary movements, reciprocity and bargaining tariffs, and the conditional most-favored-nation clause. Our differentiations and contrasts in the treatment of situations in Europe and in Latin America, in China and in our own possessions, are brought into sharp relief.

What the author has written is, as he purposed, an "account" of our economic foreign policies. In treating governmental measures, he usually gives a fair balancing of *pros* and *cons*. Occasionally he pronounces personal judgment. One might wish that he did so oftener and that he drove home more economic principles as foundations of public policy. In a short concluding chapter, "Economic diplomacy of the future," his general point of view is indicated. He warns against too ready yielding to the pressure of strongly organized business and stresses the necessity of the long view of economic consequences to the nation as a whole, of a world outlook, of a firmer support of judicial settlement of disputes, and, in general, of a closer coöperation in world affairs.

PAUL S. PEIRCE

Books about business cycles. Bull. no. 22. (Urbana: University of Illinois, Bureau of Business Research. 1928. Pp. 53. 50c.)

Bibliography includes English, French and German books and periodicals. Nearly 1,000 entries are made.

Grundlagen einer universalistischen Krisenlehre. (Jena: Fischer. 1928. Pp. 364.)

The ports of Hampton Roads: annual 1929. (Norfolk, Va.: Hampton Roads Maritime Exchange. 1928. Pp. 127.)

Accounting, Business Methods, Investments, and the Exchanges

Investment Principles and Practices. By RALPH E. BADGER. (New York: Prentice-Hall. 1928. Pp. xxv, 915. $6.00.)

The literature in the field of investments has grown rapidly within recent years. This is due not only to an increasing realization of the social importance of wise application in production of society's savings, but also to the growing complexity of investment media. There has been also a change in emphasis; no longer is the average informed investor willing to forego the advantages of entrepreneurship, and this changed attitude has rendered obsolete for most practical purposes many of the earlier studies in this field. The pendulum may have swung too far, but it probably never will return to its former groove.

The book under consideration is a noteworthy addition to the newer literature in this field. While it is designed as a textbook, it is so comprehensive in its scope as to constitute almost an encyclopedia of the subject. The arrangement followed provides for a division of the subject into four major parts. Part 1 considers the historical development of the problem, the factors bearing on the demand for and supply of capital, interest rates, and the development of an investment policy. Part 2 is essentially a treatment of the contractual elements in the different types of corporation securities, and the author remarks that it may be omitted where corporation finance has already been covered. Part 3 takes up and discusses in great detail securities of industrials, railroads, public utilities, banks and insurance companies, and large sections are devoted to government bonds, municipals, real estate securities and investment trusts. Part 4 is given over to a consideration of the mathematics of investments, the effects of taxation on investment policies, and the effects of the business cycle on security prices. Some idea of the scope of the book may be gained from the fact that over one hundred pages are devoted to public utilities alone, with an additional sixty-five pages to railroads. One of the most valuable parts of the book is an exhaustive classified bibliography of books and selected readings covering such subjects as accounting and investments, corporation finance, bank stocks, bonds, business conditions and investing, electric light and power investments, electric railroad securities, federal farm loan bonds and farm mortgages, foreign securities, gas company securities, industrial securities, insurance stocks, interest rates and the return upon invested capital, investment manuals, surveys, and periodicals, investment trusts, mathematics of investments, railroad investments, taxation on investments, and telephone and telegraph securities.

The style is simple and clear, and the author makes excellent use of reports of actual corporations to illustrate his points. This is especially effective in Chapter XIII on "The financial analysis of industrials." The chapters on financial institutions and investment trusts are particularly well done, and much of the material presented here is lacking in many other general treatises on investments.

In a book of such stupendous proportions which is on the whole so thoroughly well done, it may seem somewhat captious to criticize. It does seem, however, that the author would have been well advised to enlarge the brief consideration given to the analysis of securities from a relative standpoint. As Professor Dewing has pointed out, while all good investments must have a considerable degree of safety, not all safe investments are good investments. Business profits in this field as distinct from income may be realized by the investor who seeks not only safety in his capital commitments, but also securities the prices of which are favorable in view of all other alternatives. More attention might well have been paid, also, to the relative merits of high yield and low yield securities, as well as to high asset and low asset stocks. These subjects are touched upon by the author, but since in the opinion of the reviewer no sound investment program can be built up without giving to these factors the most serious study, the book seems deficient in these respects. Space could have been found for this had the rather elementary discussion of corporation finance in Part 2 been reduced by one-half or two-thirds. In the discussion of the relative merits of bonds and stocks as investment media, the author fails to emphasize sufficiently the vital point that where corporation bonds are adequately secured by earnings, there must inevitably be a large residuum of earnings for the stock. This tends, of course, to give the stock high intrinsic value; in other words, in cases where the bonds of a corporation are good, the stocks must be fairly good also.

R. G. Rodkey

University of Michigan Radke

NEW BOOKS

Amidon, L. C. and Lang, T. *Essentials of cost accounting.* (New York: Ronald. 1928. Pp. x, 383. $4.50.)

The striking characteristic of this book is its clear exposition of a subject which is by no means simple. Clarity is attained through a differentiation between the art and technique of cost accounting and the managerial aspects of costs and, what is rare in such a book, the giving of a minimum of attention to the latter. The same problem material has been used to demonstrate different points in various chapters resulting in a further gain in simplicity. The technique of cost accounting is introduced by recording operations first in general accounts only, then in cost accounts. The contents of the typical cost accounts are shown diagrammatically. After this comparison and contrast the student should feel that there is not any wide gap between general accounting and cost accounting.

Chapters follow on factory orders, materials, labor, burden, the factory ledger, and statements. The factory and the general ledgers are shown in parallel columns, and the typical subsidiary accounts and summary forms are carefully illustrated. Burden is presented unusually well by means of contrast in two chapters, "Actual cost of manufacturing expense" and "Applied cost of manufacturing expense."

The chapter on wage systems and incentives, credit for which is given to another book, does not appear to add anything of importance to this text and does interrupt the regular, evenly graded, progressive steps running through the discussions of cost accounting.

A well balanced elementary treatment of process, estimated, and standard costs is presented through text and problems. There is a job cost set for students to work, and a series of graded problems; some of them are drawn from American Institute or state board examinations.

The authors have accomplished their aim in producing a simplified but concrete treatment of cost accounting. The book affords an excellent foundation for those entering the field. Expertness in practice can come only from first-hand experience with manufacturing processes, and the discussion of these processes, therefore, has been omitted.

Charles A. Glover

Babenroth, A. C. and Viets, H. T., editors. *Readings in modern business literature.* (New York: Prentice-Hall. 1928. Pp. 595. $2.50.)

Balderston, C. C. *Managerial profit sharing.* (New York: Wiley. 1928. Pp. 127. $2.50.)

Baron, L. A. and Davis, F. *Material control and stores accounting.* Official pubs., vol. X, no. 11. (New York: National Association of Cost Accountants. 1929. Pp. 687-702. 75c.)

Bingham, W. V. *Industrial psychology.* Reprint and circular ser. no. 15. Reprinted from the *Report of the Proceedings of the 1928 Cambridge Congress Organized by the International Industrial Relations Association.* (The Hague: Secretariat, 66 Javastraat. Pp. 27.)

——————. *The Personnel Research Federation in 1928: annual report of the director.* Reprint and circular ser. no. 17. Reprinted from the *Personnel Journal,* vol. VII, no. 4. (New York: Personnel Research Federation, 29 W. 39th St. Pp. 15. 20c.)

Birdseye, C. F. *Arbitration and business ethics.* (New York: Appleton. $2.50.)

Bittner, G. E. *Retail profits through stock control.* Bureau of Foreign and Domestic Commerce, distribution cost studies no. 3. (Washington: Supt. Docs. 1928. Pp. 15. Gratis.)

Bond, F. D. *Stock movements and speculation.* (New York: Appleton. $2.50.)

Bonneville, J. H. *Elements of business finance, with questions and problems.* Rev. ed. (New York: Prentice-Hall. 1928. Pp. xiii, 427. $5.)

Bradford, G. G. and others. *Safe deposit operation and management.* (New York: Bankers Publishing Co. $5.)

Brookings, R. S. *Overproduction in its relation to our anti-trust, immigration, and protective tariff laws.* (Garden City, N.Y.: Country Life Press. 1927. Pp. 15.)

Bruère, H. and Pugh, G. *Profitable personnel practice.* (New York: Harper. Pp. 463. $4.)

Collins, C. W. *C.P.A. review. Answers covering questions and problems presented in book entitled C.P.A. review.* (New York: Wiley. 1928. Pp. x, 955. $8.50.)

Connor, F. L. *Labor costs of construction: a reference book for engineers, architects, contractors and builders.* (Chicago: Gillette Publishing Co. 1928. Pp. xiv, 202.)

CORNELL, W. B. *Industrial organization and management.* (New York: Ronald. 1928. Pp. xiii, 653. $5.)

Designed as a textbook for students in schools of commerce and also schools of engineering. The usual topics are considered: location and layout of plant, equipment, internal organization, comptroller's department, sales department, engineering department, purchasing department, storeskeeping, industrial relations, inspection, production control, time study, and budgets. The text has many useful illustrations and charts. A 9-page bibliography is appended.

COWAN, H. E. and others. *Commercial law by cases.* (New York: Holt. 1928. Pp. 396. $1.48.)

CRECRAFT, E. W. *Government and business.* (New York: World Book Co. 1928. Pp. xi, 508. $2.96.)

The economic functions of government are the main theme of the thirty-six chapters of the book. The fields of consumption; the control of prices, rates and services; government activities in the field of production, exchange, and distribution; public finance and business; the relations between government and transportation, communication, banking, insurance, marketing; the various professions; and private monopolies are some of the topics treated.

The interdependence of the social sciences is stressed, and the main conclusion of the book is that problems of public policy and public regulation involve both political and economic considerations; in a word, good government and sound economics should go hand in hand. The book is an interesting and suggestive piece of work.

G. M. JANES

CRICHER, A. L. *Uniform through export bill of lading: a survey of its usage and acceptability.* U. S. Dept. of Commerce, trade inf. bull. 593. (Washington: Supt. Docs. 1928. Pp. 62. 10c.)

DAHL, J. O. *Selling public hospitality: a handbook of advertising and publicity for hotels, restaurants and apartment houses.* (New York: Harper. Pp. 382. $6.)

DIPPY, A. W. *Advertising production methods: processes, methods and materials with practical suggestions for their use.* (New York: McGraw-Hill. 1929. Pp. 318. $4.)

DUNLAP, O. E., JR. *Advertising by radio.* (New York: Ronald. 1928. Pp. 186. $4.)

FISHER, E. M. *Real estate subdividing activity and population growth in nine urban areas.* Michigan business studies, vol. I, no. 9. (Ann Arbor: Univ. of Michigan, Bureau of Business Research. 1928. Pp. 61.)

Districts covered are Detroit, Cleveland, Milwaukee, Toledo, Birmingham, Grand Rapids, Flint, Lansing, and Ann Arbor.

"The areal expansion of a city should bear a statistically measurable ratio to its population growth. The discovery of this ratio should be possible through a study of the historical relationship of population to the number of urban sites in the community. Once it were established that such a ratio persists in a given community, knowledge of it should assist the subdivider greatly in determining when to add to the urban area and when to slacken his activity. It should give him a statistical basis for his judgment of the probable market for his product when it is completed. Thus it ought to aid in stabilizing the subdivision business,

in smoothing out its fluctuations, and in preventing periods of rapid, almost feverish, subdividing followed, as they have been largely in the past, by long periods of slow and painful recovery."

Gottl-Ottlilienfeld, F. *Vom Sinn der Rationalisierung.* (Jena: Fischer. 1929. Pp. viii, 103. Rmk. 2.)

Greer, H. C., editor. *Packinghouse accounting.* Prepared by the Committee on Accounting of the Institute of American Meat Packers. (Chicago: Univ. of Chicago. Pp. xiii, 404. $4.)

Gregory, H. E. *Accounting reports in business management: use of financial and operating statements, together with a system of standards and performance records in maintaining efficient management and control.* (New York: Ronald. 1928. Pp. xi, 445. $5.)

This book is offered as a second-year text in accounting and, as implied by the sub-title, as a guide for business men in the use of financial and operating reports, standard costs and budgetary plans, which may be prepared and interpreted by the accounting department. It covers part of the ground usually included in second-year collegiate courses in accounting.

The only function of accounting treated in the book is that of analyzing standard reports. Although the preface states that this analysis is from the internal management point of view, this position is not always maintained. As an example, the creditor's viewpoint is taken when it is stated that ordinarily there is no basis for knowing the method of computing the bad debts allowance. The book is not concerned with recording financial facts, or making financial reports. The primary objective of the book, analysis, is probably a secondary aim in the usual accounting course. The question may be raised, also, whether students who have not been trained in the construction and operation of cost accounts and budgets are prepared to discuss the executive uses of these devices.

The analysis of financial and operating statements is a prominent feature of courses in business finance. It would seem that there should be a book which approaches that subject through such analysis; but this book is so planned as to belong essentially in the accounting field.

Following the two introductory chapters are twelve chapters on balance sheet analysis, five of which are on control over solvency or balance sheet ratios, one on valuation, three on protection of investment through surplus and reserves, one on credits and collections, and two on working capital. The next five chapters discuss control over operations; two of these are based on analysis of the profit and loss statement, and three on efficiency reports. A chapter relates to standard costs, and the two closing chapters discuss budgets.

The author's concepts of "the reinvestment of all types of reserve," and of reserve for depreciation as an "ear-marked portion of income" cause him a great deal of difficulty in exposition, which is overcome only by long explanations and frequent repetitions. Throughout these discussions the author makes his meaning clear, although students may have difficulty occasionally with such expressions as "the use of current assets and *current liabilities* for paying heavy dividends."

From the point of view of usefulness in business, this book is filled with stimulating suggestions to the business manager for checking the control and progress of his enterprise. Charles A. Glover

HAGEMANN, G. E., compiler. *Waste prevention in manufacturing plants.* Industrial survey no. 2. (New York: Ahrens Publishing Co., 40 E. 49th St. Pp. 21.)

HALLOCK, J. W. *Production planning: its engineering elements.* (New York: Ronald Press. 1929. Pp. x, 172. $4.)

Author is head of the department of industrial engineering at the University of Pittsburgh. The volume is designed as a textbook for classes in production planning and control in engineering colleges and also as a reference book for those actually engaged in production in manufacturing establishments. Problems are given in the appendix.

HARRIMAN, N. F. *Principles of scientific purchasing.* Industrial management ser. (New York: McGraw-Hill. 1928. Pp. 301. $3.)

HAY, R. C. *Sales management fundamentals.* (New York: Harper. 1929. Pp. xi, 249. $3.50.)

This book is based upon the author's varied experience in the selling and advertising field, where he has a record of conspicuous success. Three chapters are devoted to the selection and training of salesmen. The methods of selecting salesmen are presented primarily from the standpoint of the small organization where elaborate tests and rating systems are impracticable. The majority of sales organizations make some effort to train new salesmen, but many pay little attention to the senior salesmen. Hence, a separate chapter is given over to the methods of training senior salesmen. Mr. Hay's stress is upon knowledge of the product and its application.

Branch sales management problems are analyzed in considerable detail, with emphasis upon adequate knowledge of customer purchases, of potential sales, of sales of products per salesman, per town, etc., and the proper control and supervision of the salesmen. Salesmen are to be stimulated chiefly by a judicious use of a sales quota system and the application of a proper method of compensation. In the chapter dealing with research in sales management there is an appraisal of the various types of research and again the emphasis upon the collection of an adequate body of information.

A chapter each is devoted to sales promotion and resale work followed by an interesting final chapter on sales management problems of the small manufacturer. The problems and procedure of the small manufacturer are classified and analyzed under five heads: (1) the perfecting of the product, (2) the study of past sales results, (3) the study of sales opportunities, (4) plans and methods for increasing volume and profit, (5) the operating and control system for putting plans into effect.

Teachers of sales management will find Mr. Hay's volume useful either as a reference book or as a textbook used with supplementary material.

E. T. GRETHER

HAYWARD, W. S. and WHITE, P. *Chain stores: their management and operation.* 3rd ed. (New York: McGraw-Hill. 1928. Pp. 582. $5.)

HERRING, E. P. *Group representation before Congress.* (Baltimore: Johns Hopkins Univ. Press. 1929. Pp. xviii, 309. $3.)

Contains chapters on the activities before Congress of the Chamber of Commerce of the United States, trade associations, farmers, organized labor

and employees' unions. In the appendix is a bibliography. The author is instructor in the Department of Government at Harvard University.

HOLTZCLAW, H. F. *Association management, organization and operation of civic and commercial bodies.* (New York: Ronald. 1929. Pp. v, 105. $2.50.)

"Prepared to meet the needs of officers and members of chambers of commerce and similar organizations, and for use as a textbook in college courses for the training of association secretaries." Finance, membership, meetings and activities are among the topics discussed.

HULL, C. L. *Aptitude testing.* (New York: World Book Co. 1928. Pp. xiv, 535. $2.68.)

MCNIECE, T. M. *Measurement and control of selling and distribution costs.* Official pubs., vol. X, no. 13. (New York: National Association of Cost Accountants. 1929. Pp. 823-849. 75c.)

MARSHALL, L. C., editor. *The collegiate school of business: its status at the close of the first quarter of the twentieth century.* (Chicago: University of Chicago Press. 1928. Pp. 477. $4.)

MAZE, C. L. and GLOVER, J. G. *How to analyze costs.* (New York: Ronald. 1929. Pp. xiii, 389. $5.)

MILLARD, J. W. *The wholesale grocer's problems: costs, customers and commodities.* Distribution cost studies no. 4. (Washington: Supt. Docs. 1928. Pp. 28.)

MOORE, J. H. *Handbook of financial mathematics.* (New York: Prentice-Hall. $10.)

NELSON, M. L. *Millinery merchandising.* (Minneapolis: Colwell Press, 415 3rd Ave. 1928. $1.50.)

NEWLOVE, G. H. *C.P.A. accounting: theory, questions and problems.* 3rd rev. ed. Vols. I-IV. (Washington: White Press Co. 1928. $15.)

NORTH, N. L. and others. *Real estate financing.* (New York: Prentice-Hall. 1928. Pp. 630. $6.)

NUSSBAUM, A., editor. *International year book on civil and commercial arbitration.* Vol. I. (New York: Oxford. 1928. Pp. 434. $4.25.)

O'CONNOR, J. *Born that way.* (Baltimore: Williams & Wilkins. 1928. Pp. 323. $6.)

PROCHAZKA, G. A. *Accounting and cost finding for the chemical industries.* (New York: McGraw-Hill. 1928. Pp. viii, 242. $3.)

REEDER, W. G. *The business administration of a school system.* (Boston: Ginn. 1929. Pp. 464. $2.40.)

REITELL, C. *Humanizing cost findings.* Official pubs., vol. X, no. 15. (New York: National Association of Cost Accountants. 1929. Pp. 983-995. 75c.)

RENARD, C. A. *Allocation of selling and administrative expenses to units sold.* Official pubs., vol. X, no. 10. (New York: National Association of Cost Accountants. 1929. Pp. 619-627. 75c.)

ROREM, C. R. *Accounting method.* (Chicago: University of Chicago Press. 1928. Pp. xvii, 596. $4.50.)

This is on the whole neither better nor worse than the average, good, elementary textbook on accounting. The too long continued use of any one textbook tends to deaden the quality of instruction, and those of us who wish to change now have another alternative. Whether this or some other

book would be best adapted to a particular case depends entirely on the personal preference of the instructor. C. H. P.

Rose, D. C. *A scientific approach to investment management.* (New York and London: Harper. 1928. Pp. xiv, 440. $5.)

Schmeckebier, L. F. *The District of Columbia: its government and administration.* (Baltimore: Johns Hopkins Press. 1928. Pp. xx, 943. $5.)

Shibley, F. W. *The new way to net profits.* (New York: Harper. 1928. Pp. xxi, 213. $3.)

The fact that we have no single word or simple phrase in English to express the whole range of operations from raw material to merchandized product, proves the need of just such books as this. The lack of the word shows the absence of the idea.

The author points out that, whatever may have been the practice in the past, present conditions demand close correlation of all activities from raw material to finished product. He particularly emphasizes the necessity of market study and the relating thereto of production in respect to style and volume. Like many books of the last few years, the background is the economic change brought about by the World War. In developing his theme the author not only traces the reasons for the present necessity of close integration of production and merchandizing operations, but shows that such integration is feasible and practical as a matter of business routine. The proposition, with many corollaries, is clearly and convincingly presented and is supported by examples taken from a broad experience.

The author has used the expression "scientific administration" to convey the idea and includes in his concept the determination of facts upon a scientific or engineering basis of thoroughness and accuracy. In his words, "it is a knowledge of all as one and in this composite understanding is the power that produces the net profits desired. . . . . Science as applied to business differs in no way from the older sciences, it is simply knowledge based on facts which have been ascertained by business research and analysis." The author points out that in earlier times the problem was one of production because it was a matter of development of our natural resources and transportation. For that reason "it is no reflection upon the business men of previous times that they devoted little time to an analytical study of markets and consumer psychology. The need did not exist in so compelling a way as at present. Without the impulse of necessity few men think deeply or observe keenly."

The development of the new idea of market analysis and forecast and the balancing of production against such studies, he places as the result of the 1920 "convulsion" and as a part of the program for drastic reduction of inventory and the maintenance of inventory at a new minimum as compared with former practice. In philosophic vein the author remarks, "Long before the application of modern scientific administration to business, philosophy was defined as 'the knowledge in a scientific system of the ultimate principles, elements, causes, and laws that underlie and explain all knowledge,' and a philosopher as 'one who seeks for first principles or fundamental truths, a man of practical wisdom.' " The learned man who created these definitions doubtless knew little about business, and probably he never realized that this definition of philosophy would describe

accurately the first principles of the modern industrial system as practised in the second quarter of the twentieth century.

The author's viewpoint on the whole subject is expressed in the following quotation: "Scientific administration, in its scope, embraces research in practically all its forms. It employs engineering, chemical, economic and statistical research . . . . analyzing every phase of production procedure. . . . ." The foreword by Donaldson Brown outlines the problem in a concise and convincing manner, and is in itself well worth while.

CHARLES P. TOLMAN

SLOAN, L. H. *Corporation profits. A study of their size, variation, use and distribution in a period of prosperity.* (New York and London: Harper. 1929. Pp. ix, 365. $3.50.)

SNOW, A. J. *Effective selling. A course in principles and application with typical explanatory cases, charts and problems.* Vols. I-III. (Chicago: Shaw. 1929. Pp. 151, 155-278, 281-380. $6.)

STEINER, W. H. *Investment trusts: American experience.* (New York: Adelphi. 1929. Pp. xiii, 325.)

Primarily for the specialist in investments, this book is of interest to the economist in three respects: the historical approach showing the evolution of general practices in capital accumulation; the economic effects of the investment trust; and finally the attempt at public regulation.

Mr. Steiner devotes the first three chapters to a summary of the development of the several forms of investment trusts in Great Britain and in this country. This is especially valuable because the deviations from British practice are pointed out and explained. For example, the American method of managing a fund of this kind involves reliance for as much as 25 per cent of the gross income of the trust on turnover profits accruing from short term transactions. This is almost unparallelled in British experience. A corollary of this difference is the necessity for a more elaborate staff organization here.

The economic effects of the investment trust are not treated except incidentally. They may be summarized as follows: operation under conditions of increasing returns; a tendency to narrow the range of security market fluctuations by closer realization of perfect market conditions of complete and equal knowledge on the part of both parties to the transaction; forcing central banks to keep higher gold or foreign exchange reserves against their outstanding notes because maintenance of the gold standard will be more difficult in the face of very large shifts of capital from say the New York market to London or Milan; an indication of further specialization and division of labor because of the necessity for expert direction of funds placed in foreign industries; the resultant approach to a world market for capital illustrated by the buoyant effect in 1928 of American funds on continental bourses. It is regrettable that Mr. Steiner did not give more space to these effects and less to the details of organization. This phase of the subject takes up three chapters of the eleven in the book.

In regard to the regulation of investment trusts, the chief difficulty is lack of standardization in form or procedure of investment trusts. It is thought that the development of this form would be stunted and deformed in the narrow confines of formal regulation. The ordinary laws against fraud and misrepresentation, coupled with full publicity of investment

trust holdings and a statement of management and promoters' remuneration are suggested as a substitute for the stiff codes exemplified by the restrictions on savings bank investments.

GEORGE K. MCCABE

TROLAND, L. T. *The fundamentals of human motivation.* (New York: Van Nostrand. 1928. Pp. xiv, 521. $5.)

VAUGHAN, F. L. *Marketing and advertising: an economic appraisal.* (Princeton: Princeton Univ. Press. 1928. Pp. xi, 255. $2.50.)

A discussion of the increasing cost of marketing and possible remedies whereby this cost may be reduced. As a factor in this increasing cost the service and burden of advertising are analyzed in two chapters. "Proposals for the reduction of the cost of marketing include less emphasis on quality, variety, style, services, and salesmanship; closer relationship of production and consumption; greater consideration of cost; discontinuation of indirect subsidies; and emphasis of functions rather than media. The desirability of less and better advertising and the possibility of this improvement are discussed. The measures for the prevention of acquisitive practices include the preservation of competition, promotion of fair competition, modification of the tariff, and the regulation of trading in futures."

WAGNER, M. F. *Accounting for fixed capital expenditures.* Official pubs., vol. X, no. 12. (New York: National Association of Cost Accountants. 1929. Pp. 751-765. 75c.)

WOODBRIDGE, F. W. *Elements of accounting.* (New York: Ronald. 1929. Pp. 700. $4.50.)

Accountants' index, second supplement: a bibliography of accounting literature, July, 1923-December, 1927 (inclusive). (New York: American Institute of Accountants. 1928. Pp. 789.)

Comparative study of American legislation governing commercial arbitration. English and Spanish editions. (Washington: Supt. Docs. 1928. Pp. 59. 10c.)

Dividends put to work: five years of the North American Company's stock dividend policy. (New York: North American Co., 60 Broadway. Pp. 29.)

The foundations of investment. Reprinted from a series of articles published in the *Stock Exchange Gazette.* (New York: Thomas Skinner & Co., 280 Broadway. Pp. 217. $1.25.)

Harvard business reports. Vol. V. Compiled by and published for the Graduate School of Business Administration, Harvard University. (Chicago and New York: Shaw. 1928. Pp. xii, 622.)

Margins, expenses and profits in retail hardware stores. Studies determining the relationships of margins, expenses and profits to volume of sales and city sizes, and measuring their regressive tendencies. Published by the Bureau of Business Research, Northwestern University. (Chicago: Shaw. 1928. Pp. xxv, 174. $3.)

Monthly bond values, showing accurate monthly values on bonds and other redeemable securities paying interest semi-annually, giving values accurate to the nearest cent on $1,000,000. (Boston and New York: Financial Publishing Co. London: Routledge. 1928. Pp. viii, 1492.)

A short course in investments: a brief, everyday outline of the fundamentals

of judging value and safety of the various types of investment securities. (Denver: Bosworth, Chanute, Loughbridge & Co. 1928. Pp. 50.)

Capital and Capitalistic Organization

NEW BOOKS

EISSFELDT, G. *Die Kartellierung der deutschen Elektroindustrie.* (Berlin: Carl Heymann. 1928. Pp. 112. R.M. 7.)

JENKS, J. W. and CLARK, W. E. *The trust problem.* 5th ed. enl. and rev. (Garden City, N.Y.: Doubleday, Doran. 1929. Pp. 596. $3.)

RYAN, J. A. *The ethics of public utility valuation.* (Washington: National Popular Govt. League. 1928. Pp. 32.)

SPURR, H. C., editor. *Public utilities reports, containing decisions of the public service commissions and of state and federal courts.* (Rochester, N.Y.: Public Utilities Reports, Inc. 1928. Pp. xxxvii, 973.)

Entwicklungslinien der industriellen und gewerblichen Kartellierung. I. Abschnitt. *Arbeitsplan, Maschinenbau.* (Berlin: E. S. Mittler. 1928. Pp. xi, 337. R.M. 8.80.)

Mergers and the law. (New York: National Industrial Conference Board. 1929. Pp. x, 153. $3.)

A survey of state laws on public utility commission regulation in the United States. (New York: Bonbright & Co. 1928. Pp. 16.)

Labor and Labor Organizations

Wages in Practice and Theory. By J. W. F. ROWE. (London: Routledge. 1928. Pp. x, 277. 12s. 6d.)

This book is a reconsideration of wage theory in the light of an historical study of wages during the last forty years in five leading British industries—building, cotton, coal-mining, engineering, and railroading. In each of the five, wage regulation is now conducted by national representative bodies and in four of the five there is rather complete national standardization of rates, hours, and conditions. Mr. Rowe, therefore, concludes that the theory of wages must be re-examined in the light of the methods of wage determination which have become prevalent during the last thirty or forty years.

The author does not abandon the orthodox position that wages tend to correspond to the marginal productivity of labor. He does, however, reject the conclusion which is frequently, though not necessarily, associated with the orthodox theory, that trade unions cannot advance general wages by raising the compensation of their members beyond the marginal worth of the available labor supply. He criticizes the assumption that managements are about as efficient as they are capable of being and that, therefore, trade union pressure for higher compensation can exert little effect upon the technique and the organization of industry and, consequently, upon the productivity of labor. Managerial

efficiency, according to Mr. Rowe, is largely the result of the pressure to which executives are subjected. The stimulus of competition is insufficient to assure either the most general and speedy adoption of the best technique or the most rapid invention of improvements. Trade union pressure for higher wages is likely to raise the productivity of labor by accelerating both the discovery and the spread of technical changes.

With this part of Mr. Rowe's theory I find myself in substantial agreement. But it is astonishing that his study of collective bargaining over a period of forty years in five industries yields almost no evidence in support of the theory which constitutes the major thesis of his book. On the contrary, his evidence tends to indicate that the bargaining pressure of unions exerts relatively little influence upon the productivity of labor. Unionism in the railroad industry has achieved power too recently, in Mr. Rowe's opinion, to furnish significant evidence. Both the building and the cotton industries have been strongly in the grip of custom. The bargaining pressure of powerful unions has been insufficient to break this severe grip and to stimulate technical progress. It is somewhat surprising to find that this conclusion applies to the cotton industry where the prevalent method of payment is by the piece because many piece-working unions go out of their way to compel improvements in methods of work and in plant conditions. Mr. Rowe also grants that engineering offers no evidence that trade union pressure accelerates the development and the spread of improved technique. But is he not here possibly conceding too much? The industry has experienced revolutionary changes in methods,—many of them importations from America. May not the importations, however, have been stimulated by union insistence upon higher compensation?

Coal mining is the only one of the five industries which, in Mr. Rowe's opinion, furnishes significant support for his theory. But even here he is unable to trace any *direct* and *specific* connection between trade union pressure and technical changes. He points out that aggressive and militant trade unionism has co-existed with rapid technical advance, and concludes that "it seems unlikely to be a mere coincidence that, in this period of rapid progress, a well-organized trade unionism should have developed through an extremely militant policy a pressure for higher wages which has never been equalled. . . . ." (p. 218). But this is a flimsy basis for inferring that bargaining pressure has substantially affected technical change. With equal reason it might be argued that technical progress, by raising profits, intensified the aggressive pursuit of higher wages. As far as Mr. Rowe's evidence is concerned, either or *neither* might be true.

Mr. Rowe's conclusion that trade union pressure is efficacious in stimulating technical progress leads him to propose a "revision" of important trade union policies. Unions should deliberately aim to keep wages "a trifle above" the current marginal worth of the available labor supply. In other words, they should deliberately aim to create a moderate amount of unemployment. "The permanent existence of a certain amount of unemployment is not to be regarded as a serious misfortune, still less as a disease, but rather as a mark of progress, and at the same time as its price" (p. 239). With the new wage policy should go a willingness to help employers improve the methods of production—unionists should realize "that militant trade unionism and the most forward wage policy are not incompatible with a policy of coöperation as regards the organization and technique of production . . . ." (p. 232). Finally, a forward wage policy demands "the abandonment of all restrictions on the adaptability and inventive energy of the capitalist system" (p. 233). Demarcation rules, hindrances to the fluidity of labor, inelastic systems of wage differentials belong to a past age. Mr. Rowe adds a few words of caution—trade union executives, in pressing for higher wages, must consider the limited ability and willingness of employers to make improvements in organization and technique and the possibility that capital will flow more largely into non-union or foreign enterprises. The last problem in particular is inadequately analyzed. And the effects of higher wages upon the rate of saving are not discussed at all.

It is extraordinary to find pressure for wages which exceed the marginal worth of the labor supply described as a "revision" of trade union policy. Much depends, of course, upon how one defines the labor supply. But trade unions have probably erred more often by failing to consider the effect of wage increases upon employment than by failing to demand as much as union employers could easily pay. Not stronger pressure for higher wages but more systematic effort to discover relative costs in union and non-union plants and to estimate the probable consequences of given wage advances is the change most urgently needed in wage policy—at least in the United States. American unions are beginning to establish research departments but only two or three as yet possess them. Aside from this, however, Mr. Rowe's evidence casts serious doubts upon the efficacy of wage demands as a device for breaking the grip of custom upon industry. If unions desire to accelerate change, may there not be more direct and effective ways of doing it than demands for higher compensation?

But can most unions be expected to work for more rapid industrial change? I must dissent from Mr. Rowe's declaration that militant unionism and coöperation to alter the organization and technique of

production are not incompatible. Frequently the very changes which enhance the output of industry diminish the bargaining power of trade unions,—particularly of craft unions. For this reason, the obstacles to broad coöperation between managements and unions are bound to be formidable as long as wages and working conditions are determined by bargaining power.

Nor can I agree with Mr. Rowe's somewhat sweeping condemnation of union restrictions. Many of these rules are exceedingly valuable correctives to the kind of guidance which prices and pecuniary considerations produce. Some restrictions, moreover, such as many demarcation rules, are the necessary adjuncts to the enforcement of a standard rate. The terms of specific demarcation rules may be obsolete. Nevertheless *some* rule is necessary unless the union abandons the standard minimum, which would mean giving up the collective bargain. And the very fact that rules limit the rate of technical change may be a reason for their retention rather than their abandonment. For why should the cost of change fall so heavily upon the present generation, especially when the burden can be largely eliminated simply by making changes more slowly?

Sumner H. Slichter

Cornell University

NEW BOOKS

Bezanson, A. *Earnings and working opportunity in the upholstery weavers' trade in twenty-five plants in Philadelphia. An experiment in coöperative research.* (Philadelphia: Univ. of Pennsylvania Press. 1928. Pp. xix, 131. $2.50.)

Bowley, A. L. *A new index-number of wages.* Memorandum no. 12. (London: Royal Economic Society. 1929. Pp. 7.)

Carver, A. H. *Personnel and labor problems in the packing industry.* (Chicago: Univ. of Chicago Press. 1928. Pp. xi, 226. $3.)

The author, who is a member of the industrial relations department of Swift and Company of Chicago, writes for the "rank and file of administrative and supervisory officers" of industrial establishments. There are chapters on recruiting the working force, development of individual ability, personnel records, control of labor turnover, financial incentive plans, employee representation, and treatment of sick, injured, and aged employees. A brief bibliography is appended.

Dunn, R. W. *Labor and automobiles.* (New York: International Pubs. $1.50.)

Glück, E. *John Mitchell, miner. Labor's bargain with the gilded age.* (New York: John Day Co. 1929. Pp. xvi, 270. $3.)

Harada, S. *Labor conditions in Japan.* Columbia University studies in history, economics and public law, no. 301. (New York: Columbia Univ. Press. London: P. S. King. 1928. Pp. 293. $4.50.)

Six interesting chapters are devoted to a general description of the economic background of Japan; its emergence from feudalism to capital-

ism, raw materials, capital resources, and the agrarian movement. Part 2, dealing with industrial relations, presents data on wages, cost of living, hours of work, the labor movement, and the attitude of the government toward labor. The monograph is based upon an intensive study.

HILLER, E. T. *The strike. A study in collective action.* (Chicago: Univ. of Chicago Press. 1928. Pp. xvi, 304. $2.50.)

HUTCHINS, G. *Labor and silk.* (New York: International Pubs. $1.50.)

JONES, A. C. *Trade unionism today.* (New York: Longmans Green. 1928. Pp. vi, 90. 75c.)

This book is not, as its title might suggest, a general survey of trade unionism throughout the world. It is concerned exclusively with British unionism. In the main, it deals with structure and government, and its treatment, though brief, is extremely satisfactory. It has much less, however, to say about union methods and almost nothing about policies.

On the whole, the book is written with discrimination. But it is somewhat irritating to be told that "the trade unions have identified themselves with a policy which has for its subject a new industrial system in which service is the motive . . . ." (p. 4). Trade unions are no more interested in "service" than are other groups. Their *raison d'être* always has been and still is the advancement of their own interests rather than "service" to the community. The acceptance of socialism does not alter this. Exception must also be taken to the statement that "trade unions largely win their way by skilled advocacy in negotiation" (p. 9). Skilled advocacy helps, but it is of little importance in comparison with bargaining power and often the advocacy is not very skilled. In fact, many trade unions have made gains despite the handicap of unskilled advocacy. And finally, the desire of the rank and file "to assist in the management and direction of the industries in which they are engaged" is of doubtful strength, even in Great Britain. The extremely temperate reaction of workers to the idea of control is one of the most significant developments in recent labor history. Not control as such but the removal of specific unsatisfactory conditions is what captures the interest of trade unionists.

SUMNER H. SLICHTER

LAUCK, W. J. *The new industrial revolution and wages: a survey of the radical changes in American theory and practice which have come in since the World War and created the present era of prosperity.* (New York and London: Funk & Wagnalls. 1929. Pp. ix, 308. $2.50.)

LOBSENZ, J. *The older woman in industry.* (New York: Scribner's. Pp. 281. $2.50.)

LUFFT, H. *Samuel Gompers: Arbeiterschaft und Volksgemeinschaft in den Vereinigten Staaten von Amerika.* (Berlin: Hobbing. 1928. Pp. 213.)

MORRIS, M. C. F. *The British workman past and present.* (London: Oxford Univ. Press. 1928. Pp. vi, 166. 6s.)

RAYNER, R. M. *The story of trade unionism, from the combination acts to the general strike.* (New York: Longmans. 1929. Pp. 286. $2.50.)

RAYNES, J. R. *Coal and its conflicts: a brief record of the disputes be-*

tween capital and labour in the coal-mining industry of Great Britain. (London: Benn. 1928. 21s.)

STURMFELS, W. *Die Bedeutung der Gewerkschaften für die Staatsbildung.* (Karlsruhe: Braun. 1928. Mk. 3.20.)

WARE, N. J. *The labor movement in the United States, 1860-1895.* (New York: Appleton. $3.)

WATKINS, G. S. *Labor management.* (Chicago: Shaw. 1928. Pp. xv, 726. $5.)

This is a worthy piece of work, comprehensive in scope, excellent in treatment and readable. While the volume brings little new material to light and lays no claim to originality in this respect, it brings within the covers of one book a rather complete grouping of material necessary to the understanding and supervision of personnel work. As a manual and incentive to thought for the personnel director, it should prove very useful. The book gathers a wide variety of ideas and plans, some of these in successful use, a good analysis of the problem, and suggests the necessary machinery, functions, and relations for the personnel manager. For the average business executive the book is not so good. This type of reader will find the paragraphs too long, the reasoning somewhat involved, and too long a distance between premises and conclusions.

The central thought is that the management of industry is dependent upon the management of men rather than on the management of machines and materials,—that the management of men is a matter of industrial psychology. The author asks for the intelligent humanization of industry. With this thought no intelligent student of modern industry is likely to take issue. But there is likely to be considerable difference of opinion regarding the author's attitude on the seriousness of modern industrial unrest. There will be many, coming in daily contact with the industrial situation, who will not agree that the situation is quite as bad as the author would have us believe, and who will maintain that the situation is far better than it was when the author began the preparation of his work, ten years ago. In the judgment of the reviewer the author is still under the influence of what was the industrial situation in 1919 and earlier, and in the development of his thought shows less change from the original point of view than has actually taken place in the industrial situation itself.

In Part 1, "The problem and some fundamental assumptions," the author gives an excellent and accurate picture of the point of view of labor and management. Part 2, "The historical background," shows the evolution of employer and employee relations and the business structure built around them.

Part 3, "Psychological aspects of the problem," should be read by every business executive. It is an excellent treatment of the human traits in industry; and in his analysis the author probably goes as far as he well may in the application of his findings to the industrial problem. One wonders, however, at the under-emphasis given to hope and fear as human traits to be considered in the management of men. As the result of my own experience, hope and fear are the direct avenues used by the executive, necessarily, in reaching back to the activating motives of the worker.

Parts 4, 5, 6, and 7 contain an excellent compilation of the mass of material on personnel organization, problems and methods in personnel administration, and industrial government. The author has read the books and read them well. He has also conferred with many men, and must have had wide personal experience. His material is so chosen and handled as to constitute an excellent handbook and guide. Indeed, the work is so convincing that one wishes the author might make a similar study as applied to the salesman and administrative employee. The white collar with its psychological significance is spreading rapidly to the worker in the factory.

ALFRED P. HAAKE

WHITNEY, F. R. *Employment agencies in Cincinnati.* (Cincinnati: Consumers' League of Cincinnati, 616 Provident Bank Bldg. 1928. Pp. 79.)

The basic laws of employment relations. Annual report of the Employment Relations Committee of the National Association of Manufacturers for fiscal year ended August 31, 1928. Presented at the thirty-third annual meeting of the Association, New York, October 22-24. (New York: National Assoc. of Manufacturers. 1928. Pp. 8.)

Dominion of Canada: report of the Department of Labour for the fiscal year ending March 31, 1928. (Ottawa: H. M. Stationery Office. 1929. Pp. 200. 40c.)

Forced labour: report and draft questionnaire. International Labour Conference, twelfth session. (Geneva: International Labour Office. 1929. Pp. 320.)

Freedom of association. Vol. IV. *Italy, Spain, Portugal, Greece, Serb-Croat-Slovene Kingdom, Bulgaria, Rumania.* Studies and reports, ser. A. (industrial relations) no. 31. (Geneva: International Labour Office. Boston: World Peace Foundation, 40 Mount Vernon St., 1928. Pp. xi, 405. $1.25.)

Hours of work of salaried employees: report and draft questionnaire. International Labour Conference, twelfth session. (Geneva: International Labour Office. 1929. Pp. vii, 216.)

Industrial relations programs in small plants. (New York: National Industrial Conference Board. 1929. Pp. xi, 60. $1.50.)

Industry, governments and labor. Record of the International Labor Organization. World Peace Foundation pamphlets, vol. XI, nos. 4 and 5. (Boston: World Peace Foundation. 1928. Pp. 250. $2.)

International Labour Conference: eleventh session. Vols. I and II. (Geneva: International Labour Office. 1928. Pp. lxxix, 773; iv, 468.)

Jahresberichte der gewerblichen Berufsgenossenschaften über Unfallverhütung für 1927. Herausgegeben vom Reichsarbeitsministerium. 46. Sonderheft zum Reichsarbeitsblatt. (Berlin: Reimar Hobbing. 1928. Pp. 632.)

Among the industrial professional associations which report on the prevention of accidents in 1927 are the following: miners and quarrymen, foundry, constructing machines, iron and steel, precious and base metals, musical instruments, glass, pottery, chemistry, linen, textile industries in several states, silk, paper, leather, lumber, food, sugar, dairy, brew-

ery, tobacco, clothing, chimney sweepers, building trades by states, printing, road construction, navigation, one-handed professional association, and the association for the accident insurance of vehicles. The volume is amply illustrated with pictures showing the right and wrong method of using various implements.

The Pennsylvania Railroad: schedule of regulations and rates of pay for the government of engineers, firemen, and hostlers in road and yard service. (Philadelphia: General Grievance Committee, Brotherhood of Locomotive Firemen & Enginemen, Pa. Lines East. 1928. Pp. 1063.)

Price list 33: labor, child labor, employers' liability, wages, insurance, women, strikes. 14th ed. (Washington: Supt. Docs. 1929. Pp. 31.)

Report of an enquiry into apprenticeship and training for the skilled occupations in Great Britain and Northern Ireland, 1925-26. VII. *General report.* (London: H. M. Stationery Office. 1928. Pp. 194. 5s.)

The use of research in employment stabilization. A report on applying research to steady personnel. (New York: Policyholders Service Bureau, Metropolitan Life Insurance Co. Pp. 32.)

Wages and labor's share in the value added by manufacture. Research series no. 4. (Washington: American Federation of Labor. 1928. Pp. 224. 50c.)

This collection of statistical studies was made by Jürgen Kuczynski, and originally published in the *American Federationist,* October, 1927, to April, 1928. "Their purpose is two-fold. First, they simply show the money wage income and the real wage income which the manufacturing wage-earner has received in the years 1904, 1909, 1914, 1919, 1921, 1923 and 1925. Second, they show what percentage the total amount of wages, distributed in manufacturing industry, forms of the total expenditures (including profits and excluding costs of materials) which industry has to pay in order to produce its output. That is, they show the share of labor in the value created, in the value added by manufacturing industry, or from the point of view of the manufacturer, they show the costs of wages to the manufacturer."

The work of the International Labor Organization. (New York: National Industrial Conference Board. 1928. Pp. xii, 197. $2.50.)

Contains an analysis of draft conventions and recommendations of the International Labor Conference, and also action taken by participating nations. In its preliminary form it was first reviewed by the International Labor Office and to that extent may be regarded as authoritative. The several chapters treat of labor problems in industry and commerce, migration and maritime problems, and labor problems in agriculture.

Money, Prices, Credit, and Banking

Stabilization of Prices: A Critical Study of the Various Plans Proposed for Stabilization. By Joseph S. Lawrence. (New York: Macmillan. 1928. Pp. xix, 484. $5.00.)

As the title explains, this book gives a list of all of the plans for stabilizing the purchasing power of money which are of recent origin, with criticisms of each plan as well as a study of the possible effective-

ness of the various means by which stabilization can be accomplished. It is compiled from the writings of the best known advocates of stabilization, official documents and banking and monetary statistics.

The choice of plans discussed seems to have been made with a view to include all of the post-war ones. Even the proposals published in the *Dearborn Independent* are included as being interesting curiosities. The novel plan proposed by Professor Lehfeldt and the resolutions passed by the Genoa conference in 1922 are grouped together in one chapter because they are said to be based on international coöperation (p. 161). Professor Lehfeldt proposed that gold production should be limited to an amount sufficient to maintain a stable level of world prices by the coöperation of those governments in whose territories a majority of the world's gold supply is mined. This would require the coöperation of, at the most, two countries. It might be made effective by England alone. The Genoa conference, on the other hand, proposed that all central banks coöperate by agreeing to restrict their demand for gold. These plans differ from one another more than the second does from the Strong bill, which is based on control through manipulation of the discount rate. Professor Fisher has stated that his plan, to be truly effective, requires international coöperation.

Although all the other plans discussed are of recent origin, there is one exception to this, the so-called plan of Professor Georg Friedrich Knapp. The author makes no mention of the fact that the first edition of the book by Professor Knapp appeared in 1905, and refers only to the English translation, which appeared in 1924. Professor Knapp did not propose any plan for the stabilization of prices. He merely stated that a metallic base for a paper currency is unnecessary.

Mr. Lawrence's criticisms of these plans are for the most part based upon the effect which their adoption would have upon international trade. Granting that his computations are correct, he has not answered the argument of Professor Fisher, that international trade is only one-tenth of the business of the United States and so should not be protected at the expense of all other interests.

The important indictments of stabilization in any form based on our inability to measure the true purchasing power of the monetary unit and the inability of our central banks to predict the effects of their actions on prices, is the subject of the third section of the book. Of interest in this section is the discussion of the open market operations of the federal reserve system. In this chapter a statistical study of the subject has led the author to the conclusion that these operations have enabled the reserve banks to control the New York money market, but have had little effect on the price charged the farmers of the South and West for credit.

The third section of the book includes also a chapter, reprinted from the August, 1928, *Quarterly Journal of Economics*, which uses mathematical formulæ to prove what is obvious from its mere statement—that, given time for all the inter-bank flows of funds to take place, all the banks of a community can use a given advance from the reserve bank to expand in the same ratio as would have been possible immediately if there had been but one bank. A recognition of this would have shortened the chapter considerably.

The discussion of the quantity theory of money and the stabilization of prices is based entirely on the very narrow form of the quantity theory found in Professor Fisher's *Purchasing Power of Money*. It is not a criticism of the theory as developed by Professor Cassel, that the causal factor is a change in available purchasing power, both cash and credit. This latter view was propounded by Professor Taussig in 1893 and so is not new. In the discussion of the equation of exchange of Professor Fisher, the terminology has been so confused as to obscure Professor Fisher's original meaning (p. 437).

Concerning details, the book appears to have been hastily thrown together. The proofreading was poor, permitting such obvious errors as the omission of all titles from the chapter headings except for Chapters XII, XVIII, and XXIII through XXVII, enough to show that it was the intention of the author to include them all. The charts are carefully drawn, but no attempt was made to bring them up to date. The most flagrant example of this is the chart on page 280 where two series for 1922 through 1926 are compared with a third series for 1922 through 1925 although data to complete the last are obtainable.

Caroline Whitney

Columbia University

Banking and Currency Development in South Africa, 1652-1927, with an Appendix on the Rise of Savings Banking in South Africa. By E. H. D. Arndt. (Cape Town and Johannesburg: Juta & Company. 1928. Pp. xvi, 542. 25s.)

Though, on account of their geographical dissociation, the commercial and political connections between the people of the United States and South Africa have never bulked large, the similarities of their economic and political expansion furnish the basis for a permanent useful mutual interest in each other. In both countries the pioneer converted a wilderness into the home of an advanced civilization; both were similarly influenced by the extension of the frontier, the subjection of livestock ranges to the plow, the chronic scarcity of capital for developing natural resources, the discovery of rich gold mines, and the

colonial relationship to a common mother country. There is therefore warrant to expect like developments in currency and banking in these two distant lands, and comparisons offer an excellent method of determining more exactly the principles of money, credit and banking.

It is a good fortune that Dr. Arndt has undertaken to record and interpret the South African currency and banking history because he was trained at Columbia University and knows well the American system and ideals. He is now professor of economics at Transvaal University College. His book is most painstaking and elaborately documented throughout; he did his extensive researches in original sources in libraries and government offices in London, Amsterdam, New York, and the South African capitals. His style is intensely matter-of-fact, and the narrative too detailed for popular reading.

The book is divided into two parts, Part 1 being devoted to currency and Part 2 to banking. The history of the currency at the Cape from the period of earliest settlement by the Dutch East India Company is traced through the Dutch and British régimes, and similarly, the history of the currency of the later political units—Natal, Orange Free State, the South African Republic, and the Transvaal. The experiences with Dutch and British coins and with paper money issues constitute a record of experimentation in currency systems that abundantly illustrates and tests the principles of monetary science in unique ways. The reader will not soon forget the outstanding problems faced by the Colonial Office and the South African governments in providing a metallic currency; in preventing its exportation to Java and India; in substituting sterling units for rixdollars, skillings and gilders against the stubborn custom and preference of the colonists; in attaining a uniform currency for general circulation in the several South African states; in resisting the popular obsession for paper money; in maintaining the gold standard, and in restoring that standard. Indeed, Dr. Arndt makes one feel that South Africa has been the great laboratory where the science of money has been inductively tested.

While the details of the early monetary history of these colonies are largely of interest only to South Africans, in the period since 1900 and especially since the World War, South Africa has attracted the world-wide attention of financiers, economists and statesmen on account of her high rank as gold producer and the need for gold in the postwar restoration of the gold standard in Europe and elsewhere. And it is remembered that Professor Kemmerer and Dr. Vissering composed a commission of experts on the resumption of gold payments and recommended among other things the formation of the South African Reserve Bank modeled insofar as possible upon the Federal Reserve system of the United States.

The story of banking development, as told in Part 2, is divided into quite distinct periods: in 1792 the Lombard Bank was founded; and in 1808 the Lombard Discount Bank, generally referred to as the "Government Discount Bank," was established as a branch of the Lombard Bank. With the year 1825 South Africa entered upon a new period of development; that year marked the introduction of sterling, the decline of the Lombard Bank, and the beginning of the movement for the establishment of private banking. The most interesting record of the Government Discount Bank, South Africa's first and only state bank, was brought to a close in 1843. Until 1837 the determined opposition of the government to all private banks had availed to maintain the government monopoly of banking against the spirited efforts of Ebden, Hogue, Glenelg, Phillipps and others, to get the privilege of founding a private bank. The pioneer private institution, the Cape of Good Hope Bank, founded in 1837, ushered in a period of rapid expansion of private banks, which by 1862 numbered 28 local banks with a combined paid-in capital of £924,000.

In 1862 another era in South African banking was inaugurated, of a revolutionary order, characterized by the invasion of the imperial banks, banking amalgamations on a large scale, a marked extension of banks not absorbed by the imperial banks. Between 1865 and 1890 the number of banks at the Cape was reduced from 28 with 43 branches to 7 with 66 branches; the number of branches was at a maximum in 1883 when the existing 11 banks had 99 branches. The story of banking in this period was quite similar in Natal, Orange Free State, the South African Republic, and the Transvaal.

The closing chapters of the book cover banking developments after 1900 and feature the following points: the continuation of the consolidation movement, the introduction of trade unionism in banking, the revival of agitation for a state bank, the founding of the central bank—the South African Reserve Bank, and certain new features in bank legislation, especially the legislation since the Union in 1910—the Currency act of 1914, the Banks act of 1917, the Currency and Banking act of 1920 and its amendment in 1923.

Dr. Arndt's book is a fundamental contribution to the history of currency and banking. It is, as he declares, "primarily a source book. In the absence of any authoritative literature on the subject as complete and reliable facts as possible are needed first," and these he has painstakingly supplied, leaving to others the writing of more popular versions. The evidences of meticulous scholarship are found on every page. The system of citation in footnote references is unnecessarily complicated by the use of abbreviations of abbreviated titles, but with

colonial relationship to a common mother country. There is therefore warrant to expect like developments in currency and banking in these two distant lands, and comparisons offer an excellent method of determining more exactly the principles of money, credit and banking.

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a little patience the reader can trace the references to the extensive bibliography at the close of the book.

Yale University RAY B. WESTERFIELD

A Study of Interest Rates. By KARIN KOCK. (London: P. S. King. 1929. Pp. x, 252. 12s. 6d.)

This study is one in the series of Stockholm economic studies, by members of Stockholm University. It is published in English, apparently for American readers. The study was aided by the Louis Fraenckel Fund for Travelling Fellowships, and was subsidized in the printing by the Royal Academy of Science. It is a study of interest rates as prices for the uses of capital.

> Interest is the price paid for the disposal of a certain amount of capital during a certain period and this price is determined in the loan market. In a state of equilibrium it must be high enough to equalize demand and supply. Capital which has not yet been invested is absolutely fungible, but, as shown above, the transfer from the lender to the borrower is made in different forms. . . . . Each kind of loan has therefore its interest rate, which is determined in its market and is dependent on the demand for and the supply of capital transferred in this specific form. . . . . This leads to an analysis of the various factors which determine the supply and demand in different parts of the market, or, in other words, the factors which affect the profitability of a substitution. (P. 15.)

The literature of Swedish, English, and American writers on the subject has been studied, and the operations of the financial institutions and mechanisms in these countries for the past twenty years have been noted carefully. The pages abound with references in these languages as well as German and French.

Valuable bibliographies and a detailed table of contents are included. Appendix I (pp. 205-239) is a description of the Swedish, English, and American loan markets. About twenty pages of tables and graphs are included in Appendix II.

The general theme is concerned with the interrelation of interest rates within countries and internationally also. Differences in interdependence of rates are caused by geographic differences in traditions, customs, and institutions. In Sweden the Riksbank and the commercial banks are identical with the money market; but in America, security flotation and interest for security markets, center in the stock exchanges and investment banks (p. 232). In England, trade financing is carried on largely by discount companies and bill brokers. Differing institutions result in differences in interest rates. Open market transactions are unequally available to central banks because there are geographic differences in open market institutions.

On the whole central banks "have an effective weapon in the discount rate," and open market dealing is a subsidiary instrument of

control. Preferential rediscount rates are ineffective. The effect of the official discount rate "is greater during the later phases of the boom than during the depression, or, in other words, it is easier for the central bank to force up the banks' loan rates than to make them follow a downward lead" (p. 191). Cost of banking sets the lower limit below which the loan rates of commercial banks will hardly go (p. 74). Reasons for these conclusions are worked out.

The author's style is interesting, and the format is attractive. Much erudition and sound scholarship has resulted in a convenient and admirable summary of the best literature on the subject. Such periodicals as the *Federal Reserve Bulletin* and *The Economist* (London) have been used, and the reader admires the use of institutional facts in presenting the general thesis. Many answers to incidental questions, such as the following, are found: What is the relationship between deposit rates and loan rates? Between maturity and rates? Between renewal and rates? Between liquidity and rates? Between security transactions and rates? Between the general loanable fund and the separate loan markets? This study is a factual corroboration of the theories of others rather than an original thesis. The author, however, has done a good piece of work in bringing into one volume such a large body of facts, keen analysis, and pointed comment. It is a convenient contribution to the all too limited number of practical and scholarly studies on interest rates.

WALDO F. MITCHELL

De Pauw University

NEW BOOKS

AESCHLIMANN, O. *Schweizerische Bankpolitik.* (Bern: E. Flück & Co. 1928. Pp. 127. 4.25 fr.)

AFTALION, A. *Monnaie et industrie: les grands problèmes de l'heure présente.* (Paris: Lib. du Recueil Sirey. 1929. Pp. viii, 262. 20 fr.)

ANDERSON, B. M. JR. *Some side lights on the money situation.* Chase Economic Bulletin, vol. IX, no. 2. (New York: Chase National Bank of the City of New York. 1929. Pp. 9.)

ANGELESCO, N. C. *L'expérience monétaire roumaine, 1914-1927.* (Paris: Giard. 1928. 25 fr.)

BAYART, P. *La réforme monétaire du 25 juin 1928. Le mécanisme de la stabilisation et ses effets.* (Paris: Lib. du Recueil Sirey. 1928. Pp. 35.)

BEHRENS, W. G. *Das Geldschöpfungsproblem.* Sozialwissenschaftliche Bausteine, edited by F. K. MANN. Band I. (Jena: Fischer. 1928. Pp. xii, 324. Rmk. 16.)

BLAKE, G. *Paper money.* (London: Constable. 1928. 7s. 6d.)

BURANDT, W. O. *Die Ursachen der interskandinavischen Valutakursdiver-*

genzen in Zeitraum 1915-1924. Probleme der Weltwirtschaft, edited by B. Harms. (Jena: Fischer. 1928. Pp. xvi, 197. Rmk. 12.)

Costa de Beauregard, L. *L'évolution économique de la Pologne et les réformes monétaires depuis 1920.* (Paris: Vrin. 1928. 15 fr.)

Dannenbaum, F. *Deutsche Hypothekenbanken.* Wirtschaftliche Darstellung nebst Kommentar zum Hypothekenbankgesetz, 2. Aufl. (Berlin: Franz Vahlen. 1928. Pp. vi, 536. R.M. 30.)

Dovime, G. *La stabilisation.* (Paris: Ed. Bossard. 1928. 12 fr.)

Dulles, E. L. *The French franc, 1914-1928. The facts and their interpretation.* (New York: Macmillan. 1929. Pp. xxxvi, 570.)

Elster, K. *Von der Mark zur Reichsmark. Die Geschichte der deutschen Währung in den Jahren 1914-1924.* (Jena: Fischer. 1928. Pp. x, 480. Rmk. 24.)

Franck, L. *La stabilisation monétaire en Belgique et ses résultats après vingt-six mois.* (Brussels: M. Lamertin. 1928. Pp. 19.)

Gorecki, R. *La Banque de l'Economie Nationale et son rôle dans la vie économique de la Pologne contemporaine.* (Varsovie: Banque de l'Economie Nationale. 1928. Pp. 41.)

Gregory, T. E. *An introduction to Tooke and Newmarch's A history of prices and of the state of the circulation from 1792 to 1856.* (London: P. S. King. 1928. Pp. 120. 2s. 6d.)

Harr, L. A. *Branch banking in England.* (Philadelphia: University of Pennsylvania Press. 1929. Pp. xvii, 139. $2.50.)

The monograph is intended as a practical rather than an academic study, and as such is addressed to the American banker. The author is strongly imbued with the virtues of branch banking exemplified in Great Britain; and the whole book should be viewed as an argument to persuade American bankers to abandon our unit independent bank system and substitute a consolidated system of metropolitan banks with branches, presumably nation-wide. The chief thesis in the argument is that the adoption of centralized branch banking is the obvious remedy for the unwarrantably large number of bank failures such as have befallen our country since 1919.

Chapter I compresses into sixteen small pages the "Development of English banking," and even these pages are not carefully husbanded; for on pages 24, 30 and 31 appear extensive quotations of material descriptive in character and contrasting the English and American systems. Chapter II covers the "London money market," with short paragraphs on the position of the Bank of England, the Clearing Association, joint, private, dominion, colonial and foreign banks, the accepting and discount houses and bill brokers, and several pages on the financing of the stock and bill markets. Chapter III comprises a "History of bank amalgamations" from 1826 to date; the material for this chapter is taken almost wholly from Joseph Sykes' book on the subject; there are excellent diagrammatic charts showing the genealogy of each of the "Big Five" joint-stock banks. In the next chapter these "Big Five" banks are described, together with their subsidiaries and affiliations, and a financial statement of the Midland Bank is given and analyzed. There is no pretense in these first four chapters of going to other than secondary sources of materials, such as Sykes, Leaf, Withers, Bagehot, Spalding, MacLeod, Gilbart.

Thus the first 82 pages of the 133 pages of text are devoted to introductory material. Chapter V describes the "Organization of a bank with

branches,"—the directors and managers, the departments and their functions, the clearings, and the branch organization. This is an excellent descriptive chapter; some parts of it, especially the method of clearing, are particularly informing.

In the "Conclusion," pages 114 to 133, the author argues from the English experience that branch banking in large centralized systems is sound, successful and economical, that the objections raised by Americans to it are not valid, that American business and economic welfare are handicapped by an obsolete system of small, local, independent, poorly-managed banks, and that the present beginnings of branch banking and bank amalgamations augur well and deserve promotion. RAY B. WESTERFIELD

HAYEK, F. A. *Geldtheorie und Konjunktur Theorie.* (Vienna: Hölder-Pichler-Tempsky. 1929. Pp. xii, 147.)

HAYS, H. R. *Some public aspects of modern investment banking.* Address delivered at the finance group session of the annual meeting of the Chamber of Commerce of the United States of America, Washington, D.C., May 9, 1928. (Washington: Chamber of Commerce of the U.S.A. 1928. Pp. 16.)

HELLWIG, R. *Das Bankwesen der Vereinigten Staaten von Amerika: Struktur und Entwicklungstendenzen.* Finanzwissensch. und volkswirtschaft. Studien, edited by K. BRAUER, Heft XI. (Jena: Fischer. 1928. Pp. xiv, 276. Rmk. 11.)

HERZOG, P. W. *The Morris plan of industrial banking.* (New York and Chicago: Shaw. 1928. Pp. x, 126.)

HIRSCH, W. *Grenznutzentheorie und Geldwirttheorie.* Untersuchungen zur theoretischen Nationalökonomie, edited by K. KIEHL, Heft II. (Jena: Fischer. 1928. Pp. viii, 182. Rmk. 9.)

HOLDSWORTH, J. T. *Financing an empire: history of banking in Pennsylvania.* Vols. I-IV. (Chicago: S. J. Clarke Pub. Co. 1928.)

HUBRECHT, G. *Stabilisation du franc et valorisation des créances.* (Paris: Dalloz. 1928. 60 fr.)

KNIFFIN, W. H. *Commercial banking: a treatise covering the practical operation of a commercial bank, the theory of money and banking, and the development of banking in the United States.* Vols. I and II. 2nd ed. (New York: McGraw-Hill. 1928. $7.)

KRAMER, C. *Bank von England, Reichsbank und Wallstreet. Das Notenbankwesen in gemeinverständlicher Darstellung.* (Leipzig: Kommissionsverlag Carl Fr. Fleischer. Pp. 63. R.M. 6.80.)

LONCEAUX, J. DE. *Conséquences économiques de la stabilisation belge.* (Paris: E. de Boccard. 1928. 30 fr.)

MELCHINGER, E. *Die internationale Preisbildung.* (Tübingen: Mohr. 1929. Pp. vi, 125.)

MICHAELIS, A. *Die Quantitätstheorie als Grundlage der Konjunkturforschung.* (Jena: Fischer. 1928. Pp. vii, 163.)

MISES, L. *Geldwertstabilisierung und Konjunkturpolitik.* (Jena: Gustav Fischer. 1928. Pp. 84.)

The first part of this volume deals with the problem of the stabilization of the value of money. Criticizing the well-known propositions of Professor Fisher and Mr. Keynes, which he regards as a renaissance of an old movement, the author maintains that the great advantage of the gold

standard, when accepted by several countries, lies in the impossibility of governmental influence. An index number system would cause harm, because it would introduce political and other alien influences.

His further criticism of Professor Fisher's plan is not convincing. Mises holds that the concept of a general price level is but a fiction to facilitate the analysis of price movements, and that it is impossible to use it for such purposes as Fisher proposes. This objection does little to solve the problem; for the question of the *accuracy* of index numbers is but a technical matter. With the development of statistical knowledge, it will surely be possible to devise an adequate index number or rather index numbers.

Mises is on more solid ground when he states that Fisher's plan would chiefly act upon deferred payments whereas other and much more important phenomena would not be affected by its adoption, since the relationship between prices and the amount of money and credit is not a mechanical one. As there is a difference in the behavior of the prices of goods of different kinds, stability cannot be attained by these measures.

In the second part of his book Mises gives his well-known theory of business cycles. This may be classified as one of the monetary underconsumption theories. The chief cause of business cycles, according to his contention, has been the policy of central banks, which abandoned the principles worked out by Lord Overstone and the currency school. The remedy, therefore, is the restoration of banking freedom, whereby banks would themselves take care not to expand credits. One of Mises' strongest arguments against the present form of central banking is that the cooperation of central banks checks the automatism of gold movements which hitherto prohibited inflation. This point of view, which surpasses the boldest claims of the old Manchester school, may be questioned. The over-expansion of credit was rather the result of the competition of the credit banks, which grew more and more independent of central banks. This development was well illustrated in Germany before the war.

Moreover, the history of banking provides us with several convincing evidences that banking freedom is far from being a sovereign remedy of inflation and business instability. It seems to be evident after the experiences of the last century that only a strong central bank can stand against the pressure both of the gold movements and of unhealthy developments of business.

The fear of authoritative influences upon the monetary and credit system which obviously underlies Mises' deductions, leads him into exaggerations. Some of his distrust may be justified by the history of banking practice; but he is certainly going too far in suspecting that banks or governments will inflate at every opportunity.

Although Mises' criticism of inflationist tendencies is clear and excellent, his practical conclusions may be questioned. He bases his deductions too exclusively on war and post-war experiences which are insufficient for generalization.

THOMAS BALOGH

MLYNARSKI, F. *Gold and central banks.* (New York: Macmillan. 1929. Pp. 157. $2.)

MONIGHETTI, W. *Où est l'issue? Problèmes contemporains sociaux et économiques. Projet d'un nouveau système financier permettant la suppression de tous les impôts.* Traduit du russe par N. KRATIROFF. (Paris: Imp. Voltaire. 1927. Pp. 138. 12 fr.)

MUNRO, N. *The history of the Royal Bank of Scotland, 1727-1927.* (Edinburgh: R. & R. Clark. Pp. xviii, 416.)

ROUX, P. DE. *La réforme monétaire au Maroc.* (Paris: Presses Universitaires de France. 1928. 25 fr.)

RYAN, F. W. *The significance of the British Moneylenders act of 1927.* Address delivered at the National Convention of the American Industrial Lenders Association, Grand Rapids, Michigan, September 19, 1928. Reprinted from the *1928 Year Book* of the American Industrial Lenders Association. (Grand Rapids, Mich.: American Industrial Lenders Assoc. 1928. Pp. 14.)

TAEUBER, W. *Molinaeus' Geldschuldlehre.* (Jena: Fischer. 1928. Pp. v, 90. Rmk. 4.)

THIEDEMANN, H. *Der ostdeutsche Geldmarkt.* Schriften d. Instituts f. ostdeutsche Wirtschaft a.d. Universität Königsberg, Heft XVI. (Jena: Fischer. 1928. Pp. viii, 192. Rmk. 9.)

WATKINS, L. L. *Bankers' balances: a study of the effects of the federal reserve system on banking relationships.* (Chicago: Shaw. 1929. Pp. xvi, 429. $6.)

WICKSELL, K. *Vorlesungen über Nationalökonomie auf Grundlage des Marginalprinzips.* Teil 2. *Geld und Kredit.* (Jena: Fischer. 1928. Mk. 9.)

ZBIJEWSKI, V. J. *La stabilisation monétaire en Pologne.* (Paris: Gebethner et Wolff. 1928. 10 fr.)

Banking standards under the federal reserve system: a study of norms, trends, and correlations of the assets, deposits, expenses, and earnings of member banks. Published for the Bureau of Business Research, Northwestern University. (Chicago, New York and London: Shaw. 1928. Pp. xxxviii, 420.)

Compte rendu des opérations de la Banque de Pologne pendant l'année 1928. Présenté à L'Assemblée Générale des Actionnaires du 7 février 1929. (Varsovie: Imprimerie de la Banque de Pologne. 1929. Pp. 45.)

Cost of living studies: quantity and cost estimate of the standard of living of the professional class. Compiled under the Heller Committee for Research in Social Economics of the University of California. Vol. V, no. 2. (Berkeley: Univ. of California Press. 1928. Pp. iv, 129-160.)

Europäische Banken 1927. Eine kritische Darstellung. (Prague: Verlag der "Wirtschaft." 1928. Pp. 236. R.M. 5.)

Public Finance, Taxation, and Tariff

The Classified Property Tax in the United States. By SIMEON ELBRIDGE LELAND. (Boston: Houghton Mifflin. 1928. Pp. xiv, 492. $3.50.)

Students of tax reform will welcome the appearance of the present study in the field of state and local taxation. It embodies a thorough description and analysis of the classified property tax as it has de-

veloped in the United States, and hence brings together a collection of material which will prove highly beneficial to instructors in public finance, legislative bodies and tax officials generally. This material has been widely scattered in the individual states, thus making it difficult to ascertain either the extent or significance of classification as a method of tax reform. The results which have been achieved naturally vary and are seldom to be construed categorically. They fall partially at least, in the realm of opinion. The author, however, has exercised an unusual degree of caution and good judgment in his interpretation of the various legislative enactments which have been tried out.

In Part 1, Professor Leland has dealt with the defects of the general property tax, the nature and methods of classification, early and modern developments of the movement, arguments favoring and opposed to the adoption of the classification principle, and the specific forms of property to which it has been applied. It was the injustices which arose under the uniform rule that led to the more recent development of the movement. Thirty-one states and the District of Columbia are free under their respective constitutions to adopt classified property taxes, although five of these "make practically no use of the right." Other states are endeavoring to liberalize their constitutions by abandoning the uniform rule requirement. Of the four states in which classification has been made a comprehensive part of the tax structure, one—Virginia—has recently abolished the tax as applied to intangible property, except as to one class, namely, bonds, notes, mortgages and evidences of debt. The systems obtaining in the other states are partial and apply only to "narrowly restricted classes of property." Among the states which have sought unsuccessfully to repeal the general property tax, Ohio takes first rank by reason of the fact that proposals for altering the constitution have been submitted to popular vote eleven times.

What have been the constructive achievements of classification as a means of tax reform? Here Professor Leland has endeavored to maintain a philosophical position and to take a conservative attitude. In so far as it has been tried as an automatic, self-enforcing system, the movement has been disappointing. As in the case of all tax reform measures, the outcome must depend primarily upon adequate administration. Taken in conjunction with such administration, the classified property tax, as applied particularly to intangible forms of property, under a system of low rates, has met with good results. It has obviously done little to remedy some of the imperfections of the general property tax. There are, for example, inequalities between taxing districts which can be reached only through administrative procedure. On the other hand, differential rates, when applied to certain

types of property, tend to lessen the incentive for discrimination and the injustices of a high uniform rate. In the case of intangible forms of property, "the fair treatment, and the greater equality which classification accords, not only increase the amount of such property which appears on the tax duplicate, but the promotion of equity here tends to promote fairness in other assessments by convincing the taxing officials that all property can now be assessed justly according to law. Classification makes it possible for officials to enforce the tax laws, thus engendering greater respect for all tax measures."

Even so, the question remains as to whether in a large number of states, personal and corporate income taxes may not be applied more advantageously in achieving the same results. If income taxes be combined with property taxes, is classification necessary? The author's conclusion is that, although the need for the right to classify is lessened under a combined system, it should nevertheless be included. The two types of taxation are not mutually exclusive, but in their combined use certain advantages of administration and a more fully developed tax system will be realized. The extent, however, to which it is desirable in practice to impose a classified property tax on intangibles, under a well-administered income tax law, is still a matter of experimentation. Much will continue to depend upon the extent to which uniformity of taxation in the different states can be effected.

By no means the least important part of the study is the extensive list of references which have been cited throughout in the form of footnotes, and the bibliography of official literature given in the appendices. Professor Leland's investigations are clearly marked by thoroughness and unusual breadth of vision. His book is a real contribution to tax literature. It will be found useful as a text, reference work, and compendium for tax officials.

TIPTON R. SNAVELY

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NEW BOOKS

BRAUER, K. *Die Frage einer Heranziehung der Arzte zur Gewerbesteuer. Ein Beitrag zur Erkenntnis des steuerlichen Charakters freiberuflicher Einkommen.* Heft XIV. (Jena: Fischer. Pp. viii, 96. Rmk. 4.)

COLLINGS, H. T., editor. *The tariff problems of the United States. The tariff policy of the United States re-examined in the light of the advantages and disadvantages which this policy brings to us and to foreign nations.* Annals, vol. CXLI, no. 230. (Philadelphia: American Academy of Pol. and Soc. Science. 1929. Pp. x, 290. $2.)

Among the articles contributed are: "Tariff making in Great Britain and the Dominions," by Henry Chalmers; "Tariff making in France," by Graham H. Stuart; also a group of papers on agriculture and the tariff.

JECHT, H. *Wesen und Formen der Finanzwirtschaft. Umrisse einer Fin-*

anzwirtschaftslehre und Finanzsoziologie. (Jena: Fischer. Pp. vii, 152. Rmk. 7.50.)

JENSEN, J. P. *The Kansas tax on intangibles.* Kansas studies in business, no. 9. (Lawrence: Univ. of Kansas, School of Business. 1928. Pp. 66. 50c.)

"In summarizing the conclusions of the foregoing analysis it may be said that the low-rate taxes on intangibles have not so far been signally successful from a fiscal point of view. They have produced something like two-thirds of the revenue produced by the general property tax on intangibles. This too meager result has been fostered by the hostility or apathy of many country assessors and still more deputies, and by the opposition of many taxpayers who believe or affect to believe that all property, whether tangible or intangible, is alike for purposes of taxation. As a result some owners of tangible property who owned no taxed intangibles have had to pay higher taxes, where the assessment of intangibles has been ineffective. The low-rate taxes have also been the occasion for the present impasse in bank taxation, though bankers were complaining of excessive taxation before the advent of the low-rate taxes; and the conflict would have appeared anyway, though perhaps in a different form. For the present problem of bank taxation, a return to the general property tax is no remedy. And such return would probably merely result in still greater evasion on the part of intangibles than was practiced prior to 1925.

"Against these unfavorable results may be set the following favorable effects of the low-rate taxes: They have relieved honest and unfortunate taxpayers from confiscatory taxes on intangibles. They have probably doubled or trebled or even more extensively increased the number of payers of taxes on intangibles, thereby securing a wider and more equitable apportionment of the taxes. They have made local investment of local funds possible, decreased the interest rates, and somewhat checked the emigration of capital and moneyed residents."

KLEIN, J. J. *Federal income taxation.* (New York: Wiley. 1929. Pp. xxv, 103. $10.)

MCBAIN, A. G. *Complete practical income tax.* 4th ed. (London: Gee & Co. 1928. Pp. 267. 7s. 6d.)

MARCÉ, V. DE. *Le contrôl des finances en France et à l'étranger.* Vol. I. (Paris: F. Alcan. 1928. Pp. 559. 40 fr.)

MATSUSHITA, S. *The economic effects of public debts.* (New York: Columbia Univ. Press. 1929. Pp. 186. $3.)

MONTGOMERY, R. H. *Federal tax practice: practice before the Treasury, Board of Tax Appeals and federal courts.* (New York: Ronald. 1929. Pp. vi, 757. $10.)

MONTGOMERY, R. H. *Income tax procedure 1929. A supplement to 1927 income tax procedure, bringing forward procedure for determining net income and tax, preparation of returns and payment.* (New York: Ronald. 1929. Pp. vi, 738. $7.50.)

There was no edition of this well-known handbook in 1928 because there were not many material changes in the law applicable to tax returns to be made in that year. This year, 1929, instead of revising the entire handbook as was done in previous years, a supplement is presented embodying the 1928 law and such changes in interpretations made since

1927. The supplement is to be used in conjunction with the 1927 manual.

"Congress, after making its gesture of simplifying the law, has as usual felt free to load the statute with a series of doubtful and frequently inequitable retroactive provisions. The law, in fact, has not gone far in the direction of certainty, simplicity and permanence." This is the conclusion of the author with which the reviewer finds himself in agreement. That the changes of the law in two years require some 740 octavo pages of condensed exposition is perhaps sufficient proof of the foregoing statement.

The supplement follows the same divisions of the subject as are found in the 1927 manual; and for convenience in use each paragraph carries a reference to the page of the 1927 manual where the same topic is treated. It is thorough and reliable and contains all the features favorably commented on in the reviews of the earlier volumes.

CARL C. PLEHN

PARKER, C. *The history of taxation in North Carolina during the colonial period, 1663-1776.* (New York: Columbia Univ. Press. Pp. 188. $3.75.)

POWELL, H. M. *Reducing realty taxes.* (New York: Boyd Press, 29 Reade St. 1928. Pp. 380.)

RAINEY, H. P. *Public school finance.* (New York: Century. Pp. 385. $3.)

ROBERTSON, J. M. *The political economy of free trade.* (London: P. S. King. 1928. Pp. ix, 190. 8s. 6d.)

The book is a blast against protection in general and modern English protection in particular. Unless the devotees of free trade bestir themselves, the author fears, and spend time and money in a great educational campaign such as the one conducted by Cobden and Bright and the Anti-Corn-Law League almost a century ago, an electorate unfamiliar with the free trade—protection issue will follow those leaders who call for a tariff system as a means of saving Britain from her woes. And then, the author believes, the very basis of her prosperity will be undermined. "To any student who will face the relevant historical facts and draw honest inferences," Mr. Robertson undertakes to show that free trade, for Great Britain in particular, "is the most vitally important politico-economic doctrine yet attained or attainable, being the clear resultant of whole centuries of commercial and practical experience."

To prove the virtues of free trade, Mr. Robertson marshals a familiar array of historical evidence concerning the extremes of mercantilistic regulation, the eighteenth century revolt against trade restrictions, the successful fight for free trade in England, and the progress of the movement in other countries. England and Holland, he argues, grew strong and prosperous on free trade; while, insofar as Germany, France, the United States and other countries have had similar good fortune, it has been for other reasons and in spite of their protective policies. "Economic science" grew up in reaction against mercantilism, and its teachings have steadfastly favored freedom of trade. Indeed, the whole free trade case is based firmly upon the scientific revelations of political economy. The one is truth revealed by the other. The Safe-guarding of Industries act is as much inconsistent with economic science as it is inimical to the well-being of Great Britain.

There is nothing new in Mr. Robertson's book. It is merely a spirited rendition of old doctrines. Undoubtedly most of them are far more valid than the time-honored protectionist arguments. But Mr. Robertson's faith that they are unassailably anchored in economic science is naïve, in view of the uncertain state of economic theory these days. And his constantly reiterated claim that his argument is scientific is belied by the way he denounces and tramples upon his foemen—John Ruskin, Professor Lionel D. Edie, Andrew Bonar Law, H. G. Wells, and Sir William Ashley, among others. It is not as an attempted contribution to political economy but as a propagandist document that the book should be judged.

HARRY M. CASSIDY

VITI DE MARCO, A. DE. *I primi principii dell' economia finanziaria.* (Rome: Attilio Sampaolesi. 1928. Pp. 400.)

WALKER, J. E. *Highway tax costs.* (New York: National Automobile Chamber of Commerce, 366 Madison Ave. Pp. 23.)

Cost of government in the United States, 1925-1926. Prepared by the Research Staff of the National Industrial Conference Board. (New York: National Industrial Conference Board. 1927. Pp. xix, 294. $3.50.)

This volume is the fifth to be published by the National Industrial Conference Board in its series of studies on the cost of government. While it carries forward through the fiscal year, 1926, some of the comparative data of Volume IV, and thus might by inference be taken as a revision of that study, it is in reality much more comprehensive and more systematic in arrangement than the former work. The purpose of the book is not only to present a wide array of statistical data bearing upon the total cost of the business of government in the United States, but also to throw some light on such problems as the source of tax revenues, methods of financing education and highways, debt retirement and the general distribution of the tax burden. The primary purpose, as stated in the introduction, "is to present a clear and comprehensive picture of the total cost of government in the United States in all its divisions, and of the ways in which that cost is met."

There are three general problems which claim uppermost consideration in the book, and have thus preserved a certain unity of treatment throughout. These are, first, the increase in the cost of federal, state and local government during the last few decades; secondly, the increasing proportion of public expenditures for two major functions—education and public highways; and third, an approach, within the limitations of the data, to the distribution of the tax burden among various economic groups and business interests. In addition, chapter 2 is devoted to a treatise of the public debt and chapter 8 contains a review of the objectives and procedure of the various taxpayers' associations.

In considering the growth of public expenditures, the Conference Board finds that with the growth of the nation the cost of all forms of government must inevitably increase. The relative per capita increase of all governmental expenditures from 1890 to 1925, expressed in dollars of a constant purchasing power and based on wholesale prices of the year 1913, was 354 per cent. Between 1913 and 1925, the increase per capita was slightly more than 100 per cent, while there was an actual

decrease of 1.4 per cent between the year 1924 and 1925. This temporary decline is regarded as exceptional and not indicative of the real trend. In the following year the increase in federal expenditures stated in "1913" dollars was nearly 10 per cent. With this general tendency toward a rapid expansion of governmental costs, the plea is made for a careful study and acquaintance of government finance on the part of the voters of the country. In the opinion of the reviewer, the usefulness of chapter 1 would have been much enhanced by a tabular statement of state and local expenditures by states. One searches in vain for facts concerning the increase in total expenditures by the individual states and their local subdivisions.

Turning to the analysis of tax burdens, we find that a worthy endeavor has been made to compute the proportion of taxes to the net income derived for specific economic groups, such as agriculture, public utilities and private corporations. The value of such an analysis depends upon the extent of comparable data; and the Conference Board here frankly recognized the limitations involved. Thus we are told that "the time for a comprehensive statement of the distribution of tax burdens, however, is not yet arrived. Much detailed and painstaking research must be done before this goal is even approached" (page 102). Nevertheless some interesting explorations have been made; and it is to be hoped that in subsequent studies the analysis may be carried much further.

The problem of ascertaining net income or net profits as a basis for computing the tax burden, is fundamental. Thus it has long been regarded as a well-nigh impossible thing to obtain creditable data on the income from farm operations, except for a very restricted area or group. Since the publication of the present volume, interesting studies in this field have been made in several states, for example, Iowa, Colorado and North Carolina. The material which has been brought together in the present study will be found highly useful and suggestive, not only as regards what is here revealed, but also as an aid to further investigation.

TIPTON R. SNAVELY

Cost of government in the United States, 1926-1927. (New York: National Industrial Conference Board. 1928. Pp. xi, 109.)

Sixth monographic study in the series of surveys on current costs of government. Includes not only federal but state and local expenditures.

Fiscal relations between the government of the United States and the District of Columbia. Report of the United States Bureau of Efficiency transmitted to the Committees on Appropriations of the Senate and the House of Representatives. (Washington: Supt. Docs. 1929. Pp. v, 84.)

Report of the Tax Commission of North Carolina. (Raleigh: State Tax Commission. 1928. Pp. xiv, 792.)

This excellent report is divided into two parts. Part 2, "Studies and investigations," comprehends nearly 95 per cent of the total space. The first problems attacked have to do primarily with the operation of the general property tax; they include taxation of agriculture, city real estate, public service corporations, intangible personal property, banks, and an analysis of tax administrations. Following this group of studies

are other chapters on inheritance and estate taxation, the income tax, possible taxation of highway advertising signs, and a general chapter called "Tax levies and indebtedness, 1928—state and local." Finally there is a careful analysis of comparative tax burdens in North Carolina "and neighboring or competing states." The general summary and recommendations of the Commission (Part 1) rest largely on the results of these reports of special investigations.

The investigation in general was in the hands of the secretary to the Commission, Professor Fred W. Morrison, assisted by specialists. The study of the taxation of agriculture was conducted by Professor G. W. Forster of North Carolina State College; of public service corporations by Professor Clarence Heer of the University of North Carolina; of intangibles, city real estate, and billboards by Professor Albert S. Keister of North Carolina College for Women; of bank taxation by Professor J. B. Woosley of the State University; and of income taxation by Professor Roy Blakey of the University of Minnesota.

The taxation of both farm land and city real estate is examined for the purpose of determining to what extent under-assessment prevails. The situations in various sections of the state—tidewater, coastal plain, piedmont, and mountain—and in various sized parcels of property are compared. In the case of farm property the per cent of full value at which land is assessed varies from 65 per cent in the mountain and piedmont sections to 82 per cent of estimated market value in the coastal plain (p. 169). The assessment of city real estate also varies in much the same way; but assessment is from 50.7 per cent in the mountains to 73.0 per cent of estimated full value in the tidewater area. Surveys comparing assessments of large and small parcels of real estate have usually revealed that assessment is relatively lower on large than on small items. The North Carolina investigation verifies this finding only in part. The tendency is obviously present in cities (p. 216); but in rural areas it appears (p. 172) to hold only with respect to properties worth $16,000 or less. On the other hand, if the tax burden in North Carolina is measured in terms of the per cent of total income (before taxes) absorbed by taxes, then there seems to be a consistent tendency to tax both rural and urban land less severely if the plots are large (pp. 159, 221). Tables are incorporated to show relative tax burdens in terms of percentage of income absorbed by taxes (p. 220). It appears that city real estate is taxed almost two and one-half times as heavily as national banks. Farm lands are taxed at a very slightly lower rate than city real property.

The investigation of public utility taxation is especially exhaustive. It discloses a range of assessment practice of from 61.0 per cent of the estimated market value of pullmans to 74.2 per cent of estimated market value of telephone companies. The tax burden, expressed as a percentage of net income varies as between various classes of utilities by 109.6 per cent. As particular companies are compared, the range is even more astounding, the highest burden—still in terms of the per cent of net income (before taxes) required for taxes—being nearly 300 per cent of the lowest in the same group, electric power, gas and street railway utilities.

Two other studies should at least be mentioned; one is by Professor

Woosley on the taxation of banks and the other by Professor Blakey on state income taxation. The banking study is made to bear more directly on North Carolina, but will be found suggestive for any other state. The income tax study summarizes recent American experience with state income taxation, and so will be almost as useful to other states as to North Carolina.

Certain important taxation problems are not separately analyzed in detail. The state raises nearly one and a half million dollars from license, or schedule B, taxes; and yet there is no such elaborate analysis of those as, for example, of inheritance taxes, which produce less than half as much revenue. The motor registration and gasoline taxes by means of which more than half of the state revenue is raised, are also neglected in the extensive studies. However, neither in the general analytical chapter (Chapter XXII) nor in the recommendations of the Commission are these revenue producers forgotten.

James W. Martin

Supplement to "Sanctified squander." Bull. no. 11. (Cleveland: Association for Retrenchment in Public Expenditures, 1019 Williamson Bldg. 1929. Pp. 6.)

Population and Migration

NEW BOOKS

Bogardus, E. S. *Immigration and race attitudes.* (New York: Heath. 1928. Pp. 279. $1.80.)

This volume is well planned and organized. The author succeeds in bringing the causative factors of racial maladjustment and conflict to the foreground. The approach deals in a general way with the existence of the immigration problem, its importance in the United States, and defines race attitudes. Stress is laid upon status and its influence in determining individual and group reactions toward outsiders. The origins of race antipathy and race friendliness, together with the media through which these attitudes are created and expressed, are treated in the second part of the treatise. Particular thought is given to the numerous factors instrumental in producing changes or reversals in race attitudes. In the third section of the book the author accounts for variations in racial attitudes resulting from regional and cultural contacts with foreign peoples. With reference to age, the conclusion is drawn that in the child racial reactions are entirely individual, but as the child absorbs the mores of his parents and the wider social group about him current racial generalizations become fixed in his mind. With the adult racial attitudes are subject to frequent revision as economic or social competition makes its appearance. Women appear more friendly than men in the larger group relations of life and show greater sympathy for races without high status, but are more reserved in their racial attitudes involving marriage and chums.

The value of the book lies largely in its scientific treatment of the subject matter, conclusions resting entirely upon factual data presented. The case method is used throughout. A possible criticism might be that the cases are selected from the more intelligent classes of society,

therefore the conclusions are not entirely representative of the populace and do not picture the extent or depth of race prejudice. The same train of thought leads, furthermore, to the belief that race attitudes in general are less modifiable than the illustrations indicate.

E. E. MUNTZ

DARWIN, L. *What is eugenics?* (London: Watts & Co. 1s.)

GRENORY, J. W. *Human migrations and the future.* (Philadelphia: Lippincott. 1928. $5.)

GROVES, E. R. and OGBURN, W. F. *American marriage and family relationships.* (New York: Holt. 1928. Pp. 497. $3.60.)

GUN, W. T. J. *Studies in hereditary ability.* (London: Allen & Unwin. 1928. Pp. 288. 10s. 6d.)

HIGGINS, T. W. E. *Some racial characteristics of the people of England.* (London: R. Scott. 1928. 2s. 6d.)

LEWIS, E. R. *America: nation or confusion. A study of our immigration problem.* (New York: Harper. 1928. $3.50.)

MAY, G. *Marriage laws and decisions in the United States: a manual.* (New York: Russell Sage Foundation. 1929. Pp. 476. $3.50.)

This is a companion volume to Richmond and Hall's *Marriage and the State.* It is based on field studies, in 96 cities in 30 states, of the present administration of marriage laws. It makes no attempt to appraise the strength or weakness of the laws and court decisions, but sets them forth under a uniform set of headings for each state. It should be a valuable handbook to the sociologist and the public official concerned with the legal regulation of marriage.

A.B.W.

MEARS, E. G. *Resident Orientals on the American Pacific Coast: their legal and economic status.* (Chicago: Univ. of Chicago Press. 1928. Pp. xvi, 545. $3.)

MICHELS, R. *Sittleichkeit in Ziffern? Kritik der Moralstatistik.* (Munich and Leipzig: Duncker & Humblot. 1928. Pp. 229. Mk. 7.50.)

NEISSER, H. *Der Tauschwert des Geldes.* (Jena: Fischer. 1928. Pp. 204. R.M. 9.)

RICHMOND, M. E. and HALL, F. S. *Marriage and the state: based upon field studies of the present day administration of marriage laws in the United States.* (New York: Russell Sage Foundation. 1929. Pp. 395. $2.50.)

The Sage Foundation has previously published a monograph on *Child Marriages* by the same authors. To the larger field covered by the present volume they have brought the same careful objectivity that characterized the earlier book. The state's relation to marriage is treated, very concretely and explicitly, under the following rubrics: what happens in license offices; some social aspects of marriage; the marriage ceremony; supervision and enforcement. As social aspects are treated youthful and child marriages, hasty marriages, clandestine marriages, and "evasive," out-of-state marriages. There is an informative historical introduction, and at the close a program of action. At the beginning of the introduction there is a quotation from J. L. and Barbara Hammond: "Men come to think that it is their business to explain, rather than to control,

the forces of the hour." Miss Richmond and Mr. Hall, no less than the Hammonds, do not approve this attitude. To them social research is purposive, and we believe some "scientific" economists might do well to think the matter over.

A.B.W.

TAYLOR, P. S. *Mexican labor in the United States Imperial Valley.* Univ. of California pubs. in econ., vol. VI, no. 1. (Berkeley: Univ. of California Press. 1928. Pp. 94.)

This monograph is a reprint from the University of California publications in economics, vol. VI, no. 1. It is the first of a projected series of studies on Mexican labor in the United States sponsored by the Committee on Scientific Aspects of Human Migration of the Social Science Research Council. The subjects treated are as follows: "The background," "Labor history of Imperial Valley," Mexican population," "Economic aspects of Valley agriculture," "The labor market," "Labor relations," "Housing of agricultural labor," "Non-agricultural labor," "The socio-economic ladder," "Property ownership," "Mexican clerks and business men," "Education," "Domiciliary isolation," and "Social isolation."

The whole study is on historical and analytical exposition of the influence of an American community upon a large resident Mexican laboring population, and the reaction of that population to the institutions of the community. Apparently the Mexicans in Imperial Valley constitute a real economic asset, and do not create the usual problem of relief which we commonly associate with these immigrants. There are of course problems of housing, education and Americanization. Labor organizations and other associations of Mexicans are doing a constructive work in improving the conditions of this large group of people.

On the whole, Dr. Taylor's conclusions, which are based upon a very careful analysis, are quite optimistic. It is doubtful if similar optimism would characterize the conclusions of investigations in such large communities as Los Angeles.

GORDON S. WATKINS

WORK, M. N. *A bibliography of the negro in Africa and America.* (New York: Wilson. 1928. $12.)

Dominion of New Zealand: population census, 1926. Vol. IV. *Conjugal condition.* Vol. VI. *Race aliens.* (Wellington: Census and Statistics Office. 1928; 1929. Pp. 60; 34. 2s. 6d.; 2s.)

Migration laws and treaties. Vol. II. *Immigration laws and regulations.* Studies and reports, series 0 (migration), no. 3. (Geneva: International Labour Office. 1928. Pp. vii, 486. $2.)

Population, land values and government studies of the growth and distribution of population and land values, and of problems of government. Regional survey vol. II. (New York: Regional Plan of N.Y. and Its Environs. 1929. Pp. 320.)

Recensement de la population de la Grèce, au 19 décembre 1920—1 janvier 1921. Résultats statistiques pour la Grèce centrale et eubée. A. *Population.* B. *Familles. Résultats statistiques généraux.* A. *Population.* B. *Familles.* (Athens. République Hellénique. Ministère de l'Economie

Nationale. Statistique Générale de la Grèce. 1927 and 1928. Pp. 727, 432.)

Statistics of education of negro race, 1925-1926. Bureau of Education, bull. no. 19. (Washington: Supt. Docs. 1928. Pp. 42. 10c.)

Social Problems and Reforms

Middletown: A Study in Contemporary American Culture. By Robert S. Lynd and Helen Merrell Lynd. (New York: Harcourt Brace. 1929. Pp. x, 550. $5.00.)

Once in a while some patient person does the obvious and it turns out to be almost a stroke of genius. The social sciences have long extemporized about society, community and neighborhood. Special studies have been made of the notorious trio, "dependent, defective and delinquent." But actual observation of any specific community as a whole has been left to the novelist and the anthropologist. Thus when Robert and Helen Lynd turn the searchlight of intelligent investigation upon a fairly typical town of the Middle West and publish 500 pages of interesting comment upon it we are inclined to believe that there is something in what Carlyle said about genius.

A delicate surgical operation is performed on this real town with a fictitious name, somewhere, probably in Indiana. We see it going to work, hard, uncertain work into which it has drifted with the superb casualness that marks all its behavior; work that puts a premium on youth and agility and leaves men old and fearful at forty, that offers many choices but few escapes once the choices have been made. We see it in its shrinking homes where children get so much and give so little; and in the three ring circus of community life where men, women and children, severally but not jointly, mark time or maneuver in squads, companies and battalions.

In a sense there is little in this study that was not known before. The extemporizers have hit the nail on the head more often than they had any right to expect. Ogburn's "cultural lag" is everywhere and the conclusions of the book might almost be a footnote on Ogburn's theory. Then too, most teachers, preachers, mothers, some fathers, and all children over sixteen "knew it all before." They knew, for instance, how hard it is to make both ends meet, the trouble with children or with parents as the case may be, the socially centrifugal influence on the home and the church of the movie, the automobile and the schools. Some have suspected the diminishing hospitality to ideas and the standardization of opinion. And few town dwellers need to be told that real intimacies and lifelong friendships are passing away before the noisy and superficial friendliness of Rotary and Kiwanis.

Yet the study is important. It establishes a new method in the

social sciences and marks out a new and promising field. It stiffens the edges of our knowledge and hardens the surface. It gives a peculiar and satisfying sense of reality, of body, to what has been in the past rather fuzzy and remote. "Cultural lag" is a tony phrase; but Eddie Guest's verses, quoted verbatim, over against modern techniques of glass bottle-making, bring one up with a start. And one learns so much—from the State Manual for Elementary Schools, for instance,—that, "The right of revolution does not exist in America. We had a revolution 140 years ago which makes it unnecessary to have any other revolution in this country. . . . . One of the many meanings of democracy is that it is a form of government in which the right of revolution has been lost. . . . ."

There is a touch of nostalgia in the work. The year 1924 is set over against 1890; and the tremendous superficial change that has come in the life of the town is the subject of study. There is no assertion that we are better or worse than we were, but there is the feeling throughout that we are more confused. One wonders. Was 1890 as simple as it looks from here? The present is studied with meticulous care and its confusion set forth in great detail, while only rumors come down from the nineties. Yet change is everywhere and always a by-product of changed techniques of work and play. Where adjustments are demanded they are made by additions. When teachers fail, Middletown gets teacher teachers, supervisors, super-supervisors. When a sufficiently complicated government goes bad, Middletown gets more government. When people stay away from sermons the preacher goes into the maze of clubs and societies and preaches more sermons. And when a club is formed to be exclusive, the excluded form other clubs until everyone is exclusive!

There is no answer in "Middletown" to the inevitable question, "What shall we do about it?" There probably is no answer. A hint is thrown out that better things may be expected of the children; but the discussion of the schools suggests only that the children are having a wonderful time now—in extra-curricular activities. They too seem to be "leaning on the future" and like their parents caught in the instalment plan of living.

Norman J. Ware

Wesleyan University

Incomes and Living Costs of a University Faculty. A Report Made by a Committee on the Academic Standard of Living Appointed by the Yale University Chapter of the American Association of University Professors. Edited by Yandell Henderson and

MAURICE R. DAVIE. (New Haven: Yale University Press. 1928. Pp. viii, 170. $2.00.)

Evidently the academic world is at length gathering an occupational indignation concerning the insufficiency of its salary. Evidently, also, the attempt to assure economic sufficiency is to be carried on at the scientific level dictated by time-honored standards of the profession.

The book which has just appeared from the Yale Press is a second contribution bearing evidence to the fact that the members of an academic faculty are subject to a salary policy which does not assure the profession a "basic security against economic hazards," and that the professor is therefore not free "to concentrate in peace of mind upon his appointed task." The committee on standards of living which conducted the Yale study has done an admirable piece of work. The schedule was evidently planned to establish an index of the presence or absence of those goods and services which belong in a comfort standard, rather than to get all the details of family expenditure. On the whole, complete details of a given family budget are not available.

Two leading points are investigated and answered by facts. How do salaries at Yale compare with the cost and the standard of living at Yale? How does the salary scale compare with that in kindred professions?

The review of the incomes of the faculty from salaries and other sources establishes, just as previous studies at other places have shown, that, characteristically, members of the faculty at Yale felt forced to supplement their salaries. Only nine per cent quoted salary as the only source of income. On the other hand, it was reported that "in the case of a large majority of the faculty replying, no evidence" could be found "of sufficient supplementary income from any source." The conclusions were that the current income from salary was emphatically insufficient.

One of the most interesting contributions of the volume is the carefully reasoned statement of the standard of living that a professor is entitled to after twenty-five years of service and recognition by his employers. It is argued that such a man is entitled to the amount of money necessary to maintain a home in a ten-room house free from mortgage; to keep one servant and pay for some additional occasional service; to educate his children in a preparatory school, college and professional school on an equality with the general run of students; to have an automobile. The committee investigating believes this level of living costs, in New Haven, fifteen to sixteen thousand dollars a year.

The inquiry also leads those who made it to conclude that, at present, a professor receiving the minimum pay of his rank gets about one-third of the costs of such a standard, that even the most highly

paid professor must make distinct economies to buy his children the kind of education that he and his colleagues offer. The conclusions concerning the amount of money needed to be comfortable are at once more daring and more frankly expressive of the real facts than those set forth in any previous study. It is argued that the sum of twelve thousand dollars is simply a fair remuneration for a man who has given twenty to twenty-five years of service and has been given the promotion which proves him to have done it successfully. This opinion is based, on the one hand, on the costs of living according to a standard of comfort carefully specified, and, on the other hand, on a comparison of the salary scale at Yale with earnings in other callings comparable with that of the university professors. Those who question the position should at least read the detail of costs and expenditures. The factual evidence is interestingly marshalled.

The volume is a highly important contribution on a factual basis to the argument in favor of paying competent men such returns for their effort that they shall not be forced to "subject their wives to the prospective hard and unremitting physical drudgery, and their children to the limitations of the underprivileged in a time of general financial prosperity." Further, the book is an interesting addition to the very small number of studies wherein that "comfort" standard which, in our democratic American life, inspires the scale of wants of all classes, is set down in detail.

JESSICA B. PEIXOTTO

University of California

Health and Wealth. A Survey of the Economics of World Health. By LOUIS I. DUBLIN. (New York and London: Harper. 1928. Pp. xiv, 361. $3.00.)

Probably no other institution can rival the actuarial office of a great life insurance company in opportunity to study, statistically, the economy of life, death, sickness and disease, and the vital effects of public health endeavor, medical progress, and more rational living. The fifteen essays, selected from addresses and articles previously published in popular magazines, which make up this volume, contain significant information and thought on that most fundamental element of all wealth and welfare—health. Doctor Dublin has made good, and philosophical, use of his vantage ground in the Statistical Bureau of the Metropolitan Life Insurance Company. While naturally there is some repetition, a single thread of thought runs through all these essays—the economy of human life, the non-economy of preventable sickness, and the sheer loss of premature death. If any chapters lie off this main line they are those on birth control, the education of

women for homemaking and careers, and the great American family.

At the outset we are given some calculations on the monetary value of human life. In the class which has an income of about $2,500 a year, it costs a little more than $10,000 to rear a child to the age of self-support, allowing loss for those who do not survive age 18. At this age the present worth of the net future earnings of the male in this class is calculated to be $29,000; or $32,000 at age 25. The child at birth is worth $9,333, and at five years of age, $14,156. Setting, arbitrarily, the value of females at one-half that of males, the aggregate present worth of the future net earning capacity of the population is put at 1,500 billions of dollars. This is compared with the estimated value of our material assets, 321 billions.

One's gorge may rise a little at this method of calculating human value, and one may suggest that in a disorganized dynamic era such as ours seems to be, a considerable percentage of these values based on future earning power will have to be written off, not because of sickness or physical disability, but simply because of unemployment. Unfortunately, Dr. Dublin does not tell how the estimates were arrived at. It is possible that he has made allowance for lost time not due to sickness. Nevertheless this mode of presentation has decided advantages. Not only does it use a language which the average man can instinctively understand, but it affords a most striking background on which to project the enormous losses due (other things being equal) to preventable sickness and premature death. Of course Dr. Dublin now and again employs his calculations to drive home the need of larger expenditure for public health. Expert opinion, he says, "indicates that an expenditure of $2.50 per capita wisely directed through organized channels against the preventable diseases and for public health education would reduce the annual death rate two points per thousand and correspondingly increase the expectation of life from five to seven years"; and the money value of these added years of life runs into billions of dollars. Economists absorbed in physical output, company mergers, and "prosperity" might be entertained by reading this chapter. Better still, it would be desirable that it be read, thoughtfully, by "economical" governors, legislatures and Congress.

Along the same line is the essay on "What it costs to neglect our children." An annual expenditure of $4.50 per child (as indicated by the experience of Framingham, Massachusetts) would serve to carry on the activities of child welfare in an effective manner. That would be about $180,000,000 for the whole country. "Today, the loss from child sickness alone is more than this sum and that from preventable death more than ten times as much." We spend actually only about $40,000,000 on child welfare.

On old age, while Dr. Dublin has more faith in voluntary industrial pension systems than is justifiable, he brings out much food for thought. With an increasing percentage of the population passing age 65 and with more childless old people (because of the declining birth rate) the problem of old age is sure to become more acute. Can one be sure, with Dr. Dublin, that "the American people will not shirk its responsibility?" What responsibility are our industrial drivers now assuming for the thousands of men thrown out of employment by the increasing machinization of industry—or for the men over 45 whom they will not employ under any conditon?

Very suggestive, also, and more conservative than the estimates of some other authorities, is the chapter on the possibility of extending human life. In the essay on home-making and careers, amid considerable that is trite, there is a refreshing rebuke to those employers and public schools boards who would (and do) exclude the married woman from employment simply because she is married. The substance of the chapters on birth control and the true rate of increase is too well known to need comment.

Possibly this book will not have a tenth the sale of some production of medical faddism and quackery, but it deserves a large sale and a wide reading. Despite the fact that one of the essays appeared in *American Mercury* there is no jazz in Dr. Dublin's style. He writes with beautiful simplicity and lucidity. Even a sophomore could understand his explanation of a life table. But we wonder whether the author, many stories above the noise of the common street, may not fall into Bentham's error of supposing that all you have to do to get a thing done is to demonstrate its reasonableness. We wonder how many thousand prejudices and habits and hard-boiled indifferences will have to be overcome before the country is ready to spend \$4.50 a year on the health of each child or the average corporation cares a tinker's dam for the future of the elderly man it discharges on a week's notice.

Ohio State University A. B. Wolfe

NEW BOOKS

Anderson, N. and Lindeman, E. C. *Urban sociology.* (New York: Knopf. 1928. Pp. 426. \$3.25.)

Bamesberger, V. C. *An appraisal of a social studies course, in terms of its effect upon the achievement, activities, and interests of pupils.* Contribs. to educ. no. 328. (New York: Teachers College, Columbia, Univ. 1928. Pp. 91. \$1.50.)

Baxter, G. *Social liberty.* (Norfolk, Va.: Economic Press. 1928. Pp. 101.)

Burgess, E. W., editor. *Personality and the social group.* (Chicago: Univ. of Chicago Press. \$3.)

CATHCART, E. P. *The human factor in industry.* (New York: Oxford. 1928. Pp. 111. $1.75.)

CLAPP, M. A. and STRONG, M. A. *The school and the working child: being a study of the administration of certain laws pertaining to children in industry.* (Boston: Massachusetts Child Labor Committee. 1928. Pp. x, 226. $1.)

This little book deals with child labor conditions in Massachusetts. Two codes of laws are studied—the child labor laws and the compulsory education laws. The investigation covered fifteen communities varying in size from small towns to the larger cities. Honest efforts are made in most communities to apply the laws, but certain weaknesses are apparent. It is difficult to enforce the provisions relating to the newsboy. Laxness exists in the issuance of educational certificates and the coöperation between local and state officials is still inadequate.

The study reveals the need of additional improvement in methods of control and suggests "the development of some sort of department within the school system to deal with the child outside of the classroom." The employment certificate should also be made more effective for safeguarding the interests of the child.

An appendix contains detailed information, also the child labor standards prepared by the National Association of Manufacturers.

GEORGE B. MANGOLD

COHEN, I. D. *Principles and practices of vocational guidance.* Century vocational ser. (New York: Century. 1929. Pp. 494. $3.)

DOW, G. S. *Society and its problems: an introduction to the principles of sociology.* 3rd ed. rev. and enl. (New York: Crowell. 1929. Pp. 720. $3.)

DU PONT, P. S. *Eighteenth amendment not a remedy for the drink evil.* Reprinted by permission of the *Current History Magazine.* (Washington: Assoc. against the Prohibition Amendment. Pp. 10.)

EPSTEIN, A. *The challenge of the aged.* (New York: Vanguard. $3.)

FISHER, I., and BROUGHAM, H. B. *Prohibition still at its worst.* (New York: Alcohol Information Committee. 1928. Pp. xxvii, 358. $1.75.)

An interesting collection of data supplementing *Prohibition at its Worst.* In addition to statistical data are reprints of correspondence between Drys and Wets.

FURFEY, P. H. *Social problems of childhood.* (New York: Macmillan. 1929. Pp. 298. $2.25.)

GIBBONS, C. E. and STANSBURY, C. T. *Child workers in Oklahoma.* (New York: National Child Labor Committee, 215 Fourth Ave. 1929. Pp. 35.)

HALEVY, E. *The growth of philosophic radicalism.* Translated by MARY MORRIS. (New York: Macmillan. 1928. Pp. xvii, 554. $8.50.)

HARRY, D. P. *Cost of living of teachers in the state of New York.* Contribs. to educ., no. 320. (New York: Teachers College, Columbia Univ. 1928. Pp. 190. $1.75.)

HERRING, H. L. *Welfare work in mill villages: the story of extra-mill activities in North Carolina.* (Chapel Hill: Univ. of N.C. Press. Pp. 406. $5.)

HOOK, A. *The human factor, in industry and politics: an appeal to the churches.* (London: P. S. King. 1928. Pp. xi, 211. 8s. 6d.)

JOHNSTON, G. A. *Citizenship in the industrial world.* (London and New York: Longmans Green. 1928. Pp. viii, 297. $5.)

JONES, T. J. *Essentials of civilization: a study in social values.* (New York: Holt. 1929. Pp. xxvii, 267. $2.50.)

KITSON, H. D., editor. *Commercial education in secondary schools.* (Boston: Ginn. 1929. Pp. 381. $2.20.)

LANDIS, B. Y., editor. *Handbook of rural social resources, 1928.* (Chicago: Univ. of Chicago Press. 1928. Pp. xi, 226.)

LUMLEY, F. E. *Principles of sociology.* (New York: McGraw-Hill. 1928. Pp. xii, 562.)

MCGILL, N. P. *Child workers on city streets.* Children's Bureau pub. no. 188. (Washington: Supt. Docs. 1928. Pp. 74. 15c.)

MOLEY, R. *Politics and criminal prosecution.* (New York: Minton Balch. $2.50.)

MOON, P. T., editor. *The preservation of peace.* A series of addresses and papers presented at the annual meeting of the Academy of Political Science in New York, November 23, 1928. Vol. XIII, no. 2. (New York: Academy of Pol. Sci., Columbia Univ. 1929. Pp. xvi, 131. $1.)

ODENCRANTZ, L. C. *The social worker, in family, medical and psychiatric social work.* Harper's social science ser. (New York: Harper. Pp. 390. $2.50.)

PALMER, V. M. *Field studies in sociology: a student's manual.* Social science studies, no. 12. (Chicago: Univ. of Chicago Press. 1928. Pp. 300. $2.50.)

RENNER, K. *Die Rechtsinstitute des Privatrechts und ihre soziale Funktion.* (Tübingen: Mohr. 1929. Pp. xii, 181.)

ROBINSON, C. E. *Child workers in two Connecticut towns: New Britain and Norwich.* (New York: National Child Labor Committee, 215 Fourth Avenue. 1929. Pp. 44.)

This investigation shows that in the two cities named, the statutory restrictions on child labor are on the whole enforced as far as the age limit is concerned. Of the fourteen and fifteen year old children in New Britain 27 per cent and 32 per cent of those in Norwich were excused from school for purposes of labor, either in the home or elsewhere. In New Britain the children completed an average of 7.02 grades before leaving school to go to work, and in Norwich 7.33. For a period of ten months following the first gainful employment the children were occupied approximately nine-tenths of the time. During this time, one-half of the children held but one job; one-third held two, and the remaining one-sixth from three to six positions. The typical weekly wage of the children was from $10 to $12.

SANDFORD, W. P., and YEAGER, W. H. *Business and professional speaking.* Vols. I-III. (Chicago: Shaw. 1929. Pp. 121; 125-245; 249-374.)

STEINER, J. F. *The American community in action.* (New York: Holt. Pp. 392. $3.)

VALEUR, R., and LAMBERT, E. *L'enseignement du droit en France et aux Etats-Unis. L'enseignement du droit comme science sociale et comme science internationale.* (Paris: Marcel Giard. 1929. Pp. cxxii, 393. 65 fr.)

VAN HOESEN, H. B. and WALTER, F. K. *Bibliography: practical, enumera-*

tive, historical. An introductory manual. (New York: Scribner's. 1928. Pp. xiii, 519. $7.50.)

It would not be a bad idea to require every candidate for the doctorate to read and study certain chapters of this volume before he begins to work on his dissertation. It offers no short and easy method either for making an imposing bibliography or for writing a thesis, but it does provide a broad and scholarly basis for the mastery of any subject by putting into the hands of the student a key to unlock its bibliography. The book comes more nearly putting between its two covers a bird's-eye-view of the methods and materials of the expert reference librarian than any other in the English language.

The volume originated in a course of lectures "designed to acquaint the student with such bibliographical works and methods as will facilitate his researches," given by the principal author at Princeton University, where he is assistant librarian, and in a bibliographical seminar for seniors and graduate students by the collaborating author, the librarian of the University of Minnesota. The authors have in mind the serious student who aims to become a specialist in some field and engage in writing and research. The student of economics, or of any other of the social sciences, will not find here ready-made bibliographies to suit his purpose. Only nineteen pages of text out of 519 in the volume are devoted to listing and commenting on some of the outstanding sources of bibliographical information in the social sciences, including law and education. Economics is not differentiated from the other social sciences. But by making a careful study of certain chapters and familiarizing himself with the bibliographical tools described the serious student should be able with a little experience to make a reasonably complete survey of the literature of any topic.

The bibliographical apparatus of the social sciences is far from satisfactory at the present time. The projected *Social Science Abstracts* should go a long way to improve the situation; but more than indexing and abstracting are needed by the student who wishes to master the bibliography of his field. There would seem to be a place for a bibliographical manual somewhat along the lines of Dr. Van Hoesen's volume and devoted exclusively to the social sciences in the narrower sense—perhaps including little more than economics, sociology, and political science.

Such a volume would not require chapters on the history of libraries, the history of writing, and the history of printing, nor on book decoration or book selling and publishing. In certain fields of literature and history a thorough knowledge of these subjects is of great importance to the scholar, as the authors are at pains to point out; but these subjects have little relation to the bibliography of the social sciences. Nevertheless, they do have an important cultural value and are not out of place in a volume of this kind.

C. C. Williamson

Walter, M. W. *Thrift education through school savings: based chiefly on Boston experiences.* (Boston: Women's Educational and Industrial Union. 1928. Pp. 72. 50c.)

Warner, H. S. *Prohibition, an adventure in freedom.* (Westerville, Ohio: World League against Alcoholism. 1928. Pp. 265. $2.)

Wirth, L. *The ghetto.* (Chicago: Univ. of Chicago. $3.)

Woods, E. H. *Robert A. Woods: champion of democracy.* (Boston: Houghton Mifflin. 1929. $5.)

Zorbaugh, H. *The Gold Coast and the slum.* (Chicago: Univ. of Chicago. $3.)

The handicapped child: blind, deaf and crippled. Bull. no. 93. (New York: Russell Sage Foundation Library. 1929. Pp. 4. 10c.)

A bibliography.

International ethics: preliminary report presented to the Catholic Association for International Peace by its Committee on International Ethics. (New York: Paulist Press, 401 W. 59th St. 1928. Pp. 48.)

Public schools and the worker in New York. (New York: National Industrial Conference Board. 1928. Pp. xi, 80. $1.50.)

A survey of public educational opportunities for industrial workers in New York state.

The Quebec system: a study in liquor control. (Washington: Assoc. against the Prohibition Amendment, National Press Bldg. Pp. 40.)

Report to the directors, members and friends of the Association against the Prohibition Amendment. (Washington: Assoc. against the Prohibition Amendment, National Press Bldg. 1929. Pp. 32.)

Insurance and Pensions

NEW BOOKS

Egger, A. *Die Belastung der deutschen Wirtschaft durch die Sozialversicherung.* (Jena: Fischer. Pp. viii, 290. Rmk. 14.)

Goldschmidt, E. *Die Exportkreditversicherung. Ein kritischer Beitrag zum Problem der Exportförderung.* (Berlin: Deutscher Wirtschafts-Verlag. 1928. Pp. vii, 144.)

Kreil, Dr. *Sozialversicherung und Wirtschaft. Eine Untersuchung.* (Berlin: Reimar Hobbing. 1928. Pp. 135. R.M. 6.80.)

McCaffrey, W. J. *Underwriting.* (New York: Insurance Society of N.Y. 1929. Pp. 12.)

McCahan, D. *State insurance in the United States.* (Philadelphia: Univ. of Pa. Press. Pp. 307. $3.50.)

Maclean, J. B. *Life insurance.* 2nd ed. (New York: McGraw-Hill. 1929. Pp. x, 544. $4.)

Revision of volume first published in 1924 (reviewed in volume 15 of this journal, March, 1925, p. 157).

Moore, C. I. D. *The Pacific Mutual Life Insurance Company of California: a history of the company and the development of its organization, the sixtieth anniversary, 1868-1928.* (Los Angeles: Times-Mirror Printing and Binding House. 1928. Pp. vii, 304.)

Nemchenko, L., editor. *Social insurance in the Soviet-Union.* By the Central Social Insurance Administration. (Moscow: "Voprossy Truda." 1928. Pp. 70.)

Remington, B. C. *Dictionary of fire insurance.* (New York: Pitman. 1928. Pp. 482. $8.50.)

Robertson, B. and Samuels, H. *Pension and superannuation funds: their formation and administration explained.* (London: Pitman. 1928. Pp. 134. 5s.)

ROOT, W. T. *Psychology for life insurance underwriters.* (Chicago: Shaw. 1929. Pp. xiv, 250. $3.)

SCHARLAU, M. *Die Entstehung neuer Versicherungszwige.* (Berlin: E. S. Mittler & Sohn. 1929. Pp. 87.)

THOMPSON, L. A., compiler. *Public old-age pensions in Canada: a list of references.* Reprinted from the *Monthly Labor Review,* Feb., 1929. (Washington: Supt. Docs. 1929. Pp. 430-435.)

THOMSON, J. B. *Insurable interest.* Howe readings on insurance no. 10. (New York: Insurance Society of N.Y. 1929. Pp. 22.)

VALGREN, V. N. *Developments and problems in farmers' mutual fire insurance.* U. S. Dept. of Agric., circ. 54. (Washington: Supt. Docs. 1928. Pp. 31. 5c.)

WELSON, J. B. *Dictionary of accident insurance.* (New York: Pitman. 1928. Pp. 814. $17.50.)

Annual cyclopedia of insurance in the United States, 1928. (New York: G. Reid Mackay. 1928. Pp. 600. $3.)

Group insurance: memorandum. (Princeton, N.J.: Industrial Relations Section, Princeton Univ. Pp. 21, mimeographed.)

Life insurance laws of the commonwealth of Pennsylvania, with summary. (Pittsburgh: Borland & Co. 1928. Pp. 45.)

Report on the insurance statistics of the Dominion of New Zealand for the year 1927. (Wellington: Census and Statistics Office. 1929. Pp. xvi, 27. 2s.)

Rules and financial provisions of industrial pension plans: memorandum. (Princeton, N.J.: Industrial Relations Section, Princeton University. Pp. 38, mimeographed.)

Pauperism, Charities, and Relief Measures

NEW BOOKS

BROWN, R. M. *Public poor relief in North Carolina.* (Chapel Hill: Univ. of N.C. Press. Pp. 192. $2.)

EDEN, F. M.. *The state of the poor.* Abridged and edited by A. G. L. ROGERS. (London: Routledge. 15s.)

LUNDBERG, E. O. *Public aid to mothers with dependent children: extent and fundamental principles.* U. S. Dept. of Labor, Children's Bureau pub. no. 162, revised. (Washington: Supt. Docs. 1928. Pp. 24. 5c.)

WEBB, S. and WEBB, B. *English poor law history in the last hundred years.* Vols. I and II. (London: Longmans Green. 36s.)

Socialism and Co-operative Enterprises

NEW BOOKS

GIDE, C. *La coöpération dans les Pays Latins: Amérique Latine, Italie, Espagne, Roumanie. 1926-1927.* (Paris: Assoc. pour l'Enseignement de la Coöpération. Pp. 286. 12 fr.)

SHADWELL, A. *Typhoeus: or the future of socialism.* (London: Kegan Paul. 2s. 6d.)

Proceedings of the Alberta Institute of Co-operation held in the University of Alberta, Edmonton, June 25 to June 29, 1928: an educational enterprise organized for the promotion of co-operation. (Edmonton, Alberta: H. M. Stationery Office. 1928. Pp. 257.)

Statistics and Its Methods

NEW BOOKS

Anderson, O. *Zur Problematik der empirisch-statistischen Konjunkturforschung. Kritische Betrachtung der Harvard-Methoden.* (Bonn: Kurt Schroeder. 1929. Pp. 39. M. 2.85.)

Benini, R. *Elementi di statistica metodologica, demografica ed economica.* (Rome: A. Sampaolesi. 1928.)

Bowley, A. L. *Eléments de statistique.* (Paris: Marcel Giard. 1929. Pp. xi, 610. 100 fr.)

French translation of the fifth English edition.

Chaddock, R. E. and Croxton, F. E. *Exercises in statistical methods.* (Boston: Houghton Mifflin. 1928. Pp. vi, 166. $1.75.)

A useful assembly of laboratory exercises, classified to illustrate the more important methods of statistical analysis. Exercises are arranged in groups: misuses of statistical data; the frequency distribution, including averages, dispersion and skewness; the normal curve of error; index numbers; correlation; time series; collection of data and presentation in tables; and graphic methods. Tables providing material for the exercises cover over 50 pages, and these for the most part relate to economic data.

Darmois, G. *Statistique mathématique.* (Paris: Gaston Doin. 1928. Pp. 363. 32 fr.)

Fisher, R. A. *Statistical methods of research workers.* 2nd ed. (London: Olive and B. 1928. 15s.)

Lorenz, C. *Der Grosshandelspreisindex in der Wirtschaftspraxis und Wirtschaftstheorie.* (Jena: Fischer. 1928. Pp. vii, 131. R.M. 8.)

Moeller, H. *Statistik.* (Berlin: Spaeth & Linde. 1928. Mk. 6.20.)

Apparate zum Darstellen von Veränderlichen Diagrammen nach dem System von Victor Stepanoff. (Berlin: Bruno Scamoni. 1928. Pp. 15.)

Bulletin de l'Institut International de Statistique. Tome XXIII, livraison 1. *Compte rendu de la XVIIème session de l'Institut International de Statistique au Caire, du 29 décembre 1927 au 5 janvier 1928.* (La Haye: L'Institut International de Statistique. 1928. Pp. x, 355.)

Bulletin de l'Institut International de Statistique. Tome XXIII, livraison 2. *Rapports et communications présentés à la XVIIème session de l'Institut International de Statistique, Le Caire, 1927-28.* (La Haye: L'Institut International de Statistique. 1928. Pp. vi, 777.)

Dominion of New Zealand population census, 1926. Vol. VIII. *Religious professions.* (Wellington: Census and Statistics Office. 1928. Pp. 37. 2s.)

London statistics, 1926-27. Vol. XXXII. Compiled by the London County Council. (London: P. S. King. 1928. Pp. xvi, 476. 15s.)

Contains statistical tables relating to charity, health, housing, crime, education, transportation, public utilities and public finance. There is a generous inclusion of maps and diagrams.

Statistical abstract of Peru, 1927. (Lima: Dept. of Treasury and Commerce, Bureau of Statistics. 1928. Pp. xi, 220. Gratis.)

DOCUMENTS, REPORTS, AND LEGISLATION

Industries and Commerce

The hearings before the House Committee on Ways and Means on *Tariff Readjustment—1929* have been printed in seventeen volumes, including all material presented between January 7 and April 18, 1929 (70th Congress, 2nd session, pp. 10, 684). The facts are arranged in a far more convenient form than is usual in documents of this nature. The subject matter of the testimony, together with the papers and other data submitted, are grouped together as far as practicable, and are arranged in the numerical order of the paragraphs of the Tariff Act of 1922. Each volume, which deals with a particular schedule, has its own index both of names and of commodity subjects affected by the tariff. A large number of briefs are presented in addition to the oral testimony; and these furnish a wealth of material in regard to industrial conditions.

The federal Department of Commerce has published in the series of Trade Information Bulletins: No. 594, *The Economic Recovery of Europe and Improved Purchasing Power for Agricultural Products,* by H. B. Smith (pp. 22, 10c.); No. 595, *Trade Financing and Exchange in Porto Rico and Haiti,* by H. H. Dashiell and S. H. Honaker (pp. 17, 10c.); No. 596, *The Electrical Equipment Market in Spain* (pp. 41, 10c.); No. 597, *French and German Inland Waterways,* by E. T. Chamberlain (pp. 12, 10c.); No. 598, *British Market for American Dairy Equipment and Supplies,* by B. M. Mace, Jr. (pp. 27, 10c.); No. 599, *The Marketing of Manganese Ore,* by J. W. Furness (pp. 30, 10c.); No. 600, *Radio Markets of the World, 1928-29,* compiled by L. D. Batson (pp. 84, 15c.); No. 601, *Ceylon: Its Industries, Resources, Trade and Methods of Doing Business,* by M. Turner (pp. 22); No. 603, *British Colonial Office Reports on the Rubber Situation,* compiled by E. G. Holt (pp. 35); No. 604, *The Brazilian Foodstuffs Market,* by M. A. Cremer (pp. 18, 10c.); No. 605, *German Chemical Developments in 1928,* by W. T. Daugherty (pp. 39); No. 606, *Economic Development of Siam,* by M. A. Pugh (pp. 45, 10c.); No. 607, *Boot and Shoe Industry and Trade in Great Britain,* by H. A. Burch (pp. 13, 10c.); No. 608, *Motion Pictures in Australia and New Zealand,* compiled by E. I. Way (pp. 58, 10c.); No. 609, *The Market for Household Electric Appliances in Germany,* by C. T. Zawadzki (pp. 21, 10c.); No. 610, *Market for American Foodstuffs in Siam,* by D. C. Bliss (pp. 17, 10c.); No. 611, *The Automotive Market of Australia,* by C. F. Baldwin (pp. 52, 10c.); No. 612, *The Production of Iron and Steel in Japan,* by J. H. Ehlers (pp. 46, 10c.); No. 613, *American Underwriting of Foreign Securities in 1928* (pp. 21, 10c.); No. 614, *Motion Pictures in India* (pp. 57, 10c.); No. 615, *Japanese Trade in Iron and Steel Products,* by J. H. Ehlers (pp. 30, 10c.); No. 616, *Canadian Loan Corporations,* by Emil Sauer (pp. 32, 10c.); No. 618, *Markets for Dairy Equipment and Supplies in Continental Europe* (pp. 58, 10c.); No. 619, *European Markets for American Motion-Picture Equipment,* compiled by N. D. Golden (pp. 56, 10c.); No. 620, *Market for Foodstuffs in the Netherland East Indies,* by D. C. Bliss (pp. 45, 10c.); No. 621, *British Chemical Trade in 1928,* by H. S. Fox (pp. 40, 10c.).

In the Domestic Commerce series have appeared: No. 22, *The External Trade of New England,* by R. J. McFall (1928, pp. 44, 10c.). This study

is based largely on the commodity groups used by the Interstate Commerce Commission, and consequently does not give minute details with regard to individual commodities. It is however, "a quantitative measure of the commodity movement into and out of a great economic area" and as such is in advance over anything now available. No. 25, *Transcontinental and Intercoastal Trade of the Pacific Southwest in 1926,* by R. J. McFall (1929, pp. 95, 25c.). Transcontinental trade is illustrated by a large number of maps showing the shipments to and from the Pacific southwest to and from other states for individual groups of commodities.

In the Trade Promotion series have appeared No. 72, *Shipment of Samples and Advertising Matter Abroad, including the Use of Parcel Post in Foreign Trade,* by R. P. Wakefield and Henry Chalmers (1929, pp. 248, 75c.); No. 73, *Foreign Markets for Irrigation Machinery and Equipment* (1929, 156, 30c.); No. 80, *International Trade in Petroleum and Its Products* (1929, 153, 25c.).

The United States Tariff Commission has prepared a report on the *Effects of the Cuban Reciprocity Treaty of 1902* (1929, pp. 436, 60c.). This supplements the report on reciprocity and commercial treaties published by the Tariff Commission in 1919. As stated in the preface, the reciprocity treaty with Cuba is the only one to which the United States is now a party; consequently an understanding of its operation is particularly valuable. The report is in considerable part statistical. The Tariff Commission has also made a statistical tabulation on *Textile Imports and Exports, 1891-1927* (1929, pp. 392, 60c.). This is divided into four parts covering imports for consumption, general imports, exports of domestic merchandise and exports of foreign merchandise.

The studies in differences in costs of production have been extended by the Tariff Commission to *Onions* (1929, pp. 83, 15c.); *Cast Polished Plate Glass* (1929, pp. 59, 15c.); and to *Eggs and Egg Products* (1929, pp. 36, 10c.).

In the Tariff Information Surveys undertaken by the United States Tariff Commission, a new study has appeared on *Linoleum and Floor Oilcloth* (Washington, 1929, pp. 68, 15c.).

A letter from the chairman of the Federal Trade Commission in response to a Senate resolution on *Competition and Profits in Bread and Flour* has been published as Senate Document No. 98, 70th Congress, 1st session (1928, pp. 509). This is the third volume upon the general subject of conditions in the bread baking industry. Several chapters cover the distribution of consumer's price of bread, marketing bread, competitive activities of American Bakers' Association, competitive activities of other associations, prices of bread, bakery consolidations, profits and costs of bread bakers, wholesale flour distribution, profits and costs in flour milling, and wheat handlers' margins.

Part 1 of a letter from the chairman of the Federal Trade Commission transmitting a report of *Resale Price Maintenance* has been published as House Document No. 546, 70th Congress, 2nd session (1929, pp. 141). This report was undertaken on the initiative of the Commission, and covers information received in reply to questionnaires sent to manufacturers, wholesalers, retailers, and consumers, together with a discussion of legal status

of resale price maintenance in the United States and certain foreign countries.

The report of the Federal Trade Commission on *Open-Price Trade Associations*, recently transmitted to the Senate in response to Senate Resolution No. 28, of March 17, 1925, has been printed as Senate Document No. 226, 70th Congress, 2nd Session (Washington, 1929, pp. 516). This is an exhaustive study covering the history and character of open-price associations, questionable activities, and conclusions and recommendations. One chapter is devoted to the activities of five lumber associations. The appendix contains statistical tables of indexes showing the variability of wholesale prices of commodities produced by members of open-price associations.

The *Annual Report* of the Federal Trade Commission for the fiscal year ended June 30, 1928 (pp. 202, 20c.) contains a summary of the various investigations which have been made by the Commission, including inquiries in the electric power industry, petroleum prices, stock dividends, bread, flour and grain, resale price maintenance, open price associations, chain stores, and blue sky securities.

The Bureau of Railway Economics continues its study of *Commodity Prices in Their Relation to Transportation Costs* in Bulletin No. 34, *Apples* (February, 1929).

Statistical Bulletin No. 25 of the United States Department of Agriculture deals with *Dairy Statistics* for the year ended December 31, 1926, with comparable data for earlier years (1929, pp. 256, 35c.). This compilation was prepared by the Bureau of Agricultural Economics.

A letter from the Secretary of Agriculture in response to a Senate Resolution calling for a report concerning the effect upon producers of grain of the suspension during the period from February 26, 1927, to October 31, 1927, of the requirement for the making of reports by members of grain futures exchanges has been printed as Senate Document No. 264, 70th Congress, 2nd Session (Washington, 1929, pp. 68).

Labor

The federal Bureau of Labor Statistics has issued the following bulletins:

No. 464, *Retail Prices, 1890 to 1927* (October, 1928, pp. 221, 35c.). These prices relate to food, coal, gas and electricity.

No. 467, *Minimum Wage Legislation in Various Countries*, by R. Broda (December, 1928, pp. 125, 20c.). The study covers wage regulation in Australia, compulsory arbitration in New Zealand, the British trade boards, minimum wage for women in the United States, state interference with wages in Canada, wage regulation in South Africa and Mexico, protection of home workers through minimum wage in France, Norway, Argentina, Germany and Spain. The work is carefully documented.

No. 468, *Trade Agreements, 1927* (December, 1928, pp. 237, 35c.). This is the fourth bulletin in the series.

No. 471, *Wages and Hours in Foundries and Machine Shops, 1927* (December, 1928, pp. 121, 20c.).

No. 472, *Wages and Hours of Labor in the Slaughtering and Meat-Packing Industry, 1927* (January, 1929, pp. 163, 25c.).

No. 473, ***Wholesale Prices, 1913 to 1927*** (January, 1929, pp. 299, 50c.).

No. 474, ***Productivity of Labor in Merchant Blast Furnaces*** (December, 1928, pp. 145, 25c.). Data for this study were obtained for the most part by field agents from the records of the companies. The period included covers the years 1911 to 1927, thus showing changes during the pre-war, war, and post-war years.

No. 476, ***Union Scales of Wages and Hours of Labor, 1927-1928*** (February, 1929, pp. 169, 25c.). This is a supplement to Bulletin No. 457.

No. 477, ***Public Service Retirement Systems: United States, Canada, and Europe*** (January, 1929, pp. 223, 35c.).

No. 482, ***Union Scales of Wages and Hours of Labor, May 15, 1928*** (March, 1929, pp. 241, 35c.).

No. 483, ***Conditions in the Shoe Industry in Haverhill, Mass., 1928*** (January, 1929, pp. 107, 20c.).

Public Finance

Double Taxation: The recent publication of a *Collection of International Agreements and Internal Legal Provisions for the Prevention of Double Taxation and Fiscal Evasion* (League document 1928, II. 45) by the League of Nations, completes an entire series of League documentation on this complicated subject. Since 1920 League committees composed successively of economic, technical, and government experts, in collaboration with the International Chamber of Commerce, have been working toward a solution of the continually increasing difficulties caused by double taxation. The present collection of treaties and internal provisions, together with the six final draft conventions agreed upon by the meeting of government experts of October, 1928, indicates the end of this phase of the experts' work. The stage is now set for the concluding of bilateral conventions between governments, based on the groundwork laid by the experts, and on the various bilateral agreements already recorded in the collection of texts.

From the beginning of their work the League experts have been assisted by Americans prominent in the field. In 1923 Professor Edwin R. A. Seligman of Columbia University was one of four economists selected by the League's Financial Committee to examine the question from a theoretic standpoint. The conclusions reached by Professor Seligman and his associates (League document F. 19) enabled the League to assemble another committee of experts to examine the question from the administrative point of view. When, in 1926, this committee was enlarged in order to include greater representation of opinion, the United States government was asked to nominate a member. Thereupon the government appointed Professor Thomas S. Adams of Yale University, former economic adviser to the Treasury Department, member of the taxation committees of both the United States and International Chambers of Commerce. In his capacity as expert at the meeting in London, April, 1927, Professor Adams had two American assistants, Mr. Mitchell B. Carroll and Miss Annabel Matthews. Mr. Carroll is chief of Tax Section, Commercial Laws Division, Department of Commerce, and has made first-hand studies of European double-taxation matters for the Department of Commerce. Miss Matthews is an attorney specializing in matters involving foreign taxes for the Bureau of Internal Revenue, Treasury Department. Representing the International Chamber of Commerce at this meeting was Mr. George O. May, sen-

ior partner of Price, Waterhouse and Company, New York, and also member of the Double Taxation Committee of the National American Committee of the International Chamber of Commerce.

While the conclusions reached by the experts at the 1927 London conference (League document 1927. II. 40) were not binding on their governments, four tentative draft conventions emerged as "formulae capable of acceptance by everyone." They subsequently served as a basis for the work of the more comprehensive committee of government experts, which met in Geneva in October, 1928, to formulate the final model conventions, submitted later to governments. These latter drafts were six in number (League document 1928. II. 49), and were intended to give governments expert texts for their own use in making bilateral treaties.

The collection of treaty texts mentioned above was undertaken by the Secretariat of the League to supplement the work of the various committees. It was prepared, in fact, at the request of the government experts, who in April, 1927, considered that "the conclusion of bilateral conventions would be made easier if all the fiscal administrations throughout the world had access to the texts of the conventions already concluded. They would then be able to take advantage of the work done abroad and to keep abreast of the progress made in this matter in other countries. The publication of these texts would have the further effect of strengthening the tendency toward uniformity in future conventions."

The experts' plan, in effect, "concedes to the country of origin the exclusive right to levy its impersonal taxes on certain kinds of income arising within its frontiers, but reserves to the country of residence the right to impose its impersonal tax on income not stipulated as taxable in the country of origin, and its personal tax on income from all sources. . . . . The principal advantage of this plan is that neither the country of origin nor the country of residence make a complete sacrifice in favor of the other. Each receives its share of the tax. The country of origin collects a fixed rate in the first instance. The country of residence then levies its personal tax on the recipient in respect of his total income, inclusive of that already taxed at origin."[1]

The fundamental difference between the present American system and the experts' proposals is that the American system is based on the principle of origin. Under it, says Mr. Carroll, "the country of residence by reciprocal agreement concedes the prior right to tax to the country of origin, and grants relief against its own tax on total income within the limitation of the amount its own tax would have been if the foreign income had proceeded from domestic sources. . . . . This system is considered satisfactory for a nation that desires to encourage the expansion of its foreign trade, and is willing to afford relief from double taxation to its own citizens or residents, irrespective of the measures other states may take."

In the opinion of the three American officials who have been most actively engaged in the task of trying to eliminate international double taxation, the position of the United States in the matter is not particularly favorable, especially if our status is compared with that of those European countries which are now benefiting from reciprocal agreements concluded in the past few years. "Unless the United States," writes Professor Adams,[2] "can de-

[1] Mitchell B. Carroll in *U. S. Trade Information Bulletin* No. 523.
[2] Introduction in *U. S. Trade Information Bulletin* No. 523.

vise ways and means to participate effectively in this movement, our business concerns—particularly American exporters—may find themselves in a few years competing with foreign rivals who are relieved from a substantial burden of double taxation to which our nationals and/or residents are subject."

Both Messrs. May and Carroll have corroborated this statement, the former observing in an article in *Foreign Affairs* that "with our growing interests in foreign countries it would seem wise to adopt a liberal policy." Mr. Carroll mentions more specifically that "certain European countries, through their reciprocal agreements, have accorded their citizens greater relief than the United States has given to Americans, in respect of income received within the country."

In one field, however, American leadership is undisputed. In the Revenue act of 1921 a pioneer step was taken when "the United States in effect, offered to exempt profits derived from the operation of ships documented under the laws of other countries, provided such countries exempted profits derived from the operation of ships documented under the laws of the United States." Almost immediately this offer was accepted by the British government, and within five years by most of the great maritime countries. "International shipping concerns have been practically freed from the burdensome and particularly vexatious form of double taxation to which they were formally subjected. They are now governed by one substantially uniform provision regarding the country in which their profits are taxable."

This agreement, which Professor Adams regards as a model for future solutions supplementary to the bilateral conventions, was the first of its kind to be put into actual practice. Its principle was accepted completely by the experts, and it seems likely to endure as a model for future reciprocal agreements.

Below is given a list of double taxation documents, in chronological order, published by the League of Nations. In the United States these may be obtained from the World Peace Foundation, 40 Mount Vernon Street, Boston, Massachusetts.

Memorandum on Double Taxation, by Sir Basil P. Blackett. *Note on the Effect of Double Taxation Upon the Placing of Investments Abroad*, prepared for and circulated by Sir Basil P. Blackett. 1921. 43 pp. Number for both documents, E.F.S. 16, A. 16 .... $ .80

Report on Double Taxation Submitted to the Financial Committee, by Professors Bruins, Einaudi, Seligman, and Sir Josiah Stamp. No. E.F.S. 73, F. 19. 1923. 53 pp. .... .50

Double Taxation and Tax Evasion. Report and Resolutions Submitted by the Technical Experts (European Administrative) to the Financial Committee of the League of Nations. No. F. 212. 1925. 45 pp. .... .40

Double Taxation and Tax Evasion. Report Presented by the Committee of Technical Experts on Double Taxation and Tax Evasion. (Enlarged Committee, including American member.) No. 1927. II.40. 1927. 33 pp. .... .30

Summary of Observations Received from Governments on Report of Technical Experts (Preceding Document). No. 1928. II.46. 1928. 19 pp. .... .20

Double Taxation and Tax Evasion. Report Presented by General Meeting of Government Experts on Double Taxation and Tax Evasion (Final Meeting). No. 1928. II.49. 1928. 40 pp. .... .40

Double Taxation and Fiscal Evasion. Collection of International Agreements and Internal Legal Provisions for the Prevention of Double Taxation and Fiscal Evasion. No. 1928. II.45. 1929. 278 pp. 2.50

Total postpaid $5.10

ALLYN ABBOTT YOUNG

This minute has been prepared by a committee of the American Economic Association, consisting of T. S. Adams, W. M. Daniels, E. E. Day, F. S. Deibler, and E. F. Gay.

Professor Allyn Young's death in London on March 6, 1929, was not only a tragic blow to his many friends, but also a notable loss to economic scholarship. The American Economic Association loses in him a member who had rendered services of unusual value and devotion. He became a member of the Association in 1900; served on the board of editors from 1911 to 1913; acted as secretary-treasurer from 1914 to 1920; became vice-president in 1921; president in 1925; and for the ensuing three years continued as a member of the Executive Committee. From 1922 to 1927 he was a member of the Joint Census Advisory Committee; and he was the first representative of the Association on the American Council of Learned Societies Devoted to Humanistic Studies. Though not officially nominated by the Association as its representative on the board of directors of the National Bureau of Economic Research, yet it was his official, as well as his professional position which led to that appointment.

His term of office as secretary-treasurer covered the duration of the World War which imposed upon the officers of the Association new duties and was marked by rapid expansion in its membership and activities. In 1917—during which year Young was president of the American Statistical Association—he became director of research of the War Trade Board, and in 1918 chief of the Division of Economics and Statistics of the American Commission to Negotiate Peace. In the latter capacity he rendered important service during the peace negotiations at Paris, for which he was made a Commander of the Order of the Crown of Belgium. After the war he served as a member of the Massachusetts Committee on Pensions; assisted Jeremiah Smith in the rehabilitation of Hungary, and assisted in the planning and conduct of various economic congresses and investigations carried out under the auspices of the League of Nations.

In appreciation of his distinguished service to economic scholarship and the American Economic Association in particular, the Executive Committee has directed the publication of the foregoing record of his services to the Association, and the reproduction in part of the following minute on the life and services of Allyn Abbott Young, prepared by a committee of his Harvard colleagues and placed upon the records of the Faculty of Arts and Sciences of Harvard University at the meeting of April 16, 1929:

"Allyn Abbott Young was born at Kenton, Ohio, September 19, 1876. He was of New England stock, his forebears English on both sides. The family was intellectual; the father, a brother, and a sister, were teachers of high quality. His undergraduate work was done at Hiram College, Ohio, where he graduated in 1894. After taking his Ph.D. degree at Wisconsin in 1902, he entered on a remarkably varied academic career, at Western Reserve University, Dartmouth College, the University of Wisconsin, Stanford University, Washington University (St. Louis), Cornell University, Harvard University, and the London School of Economics. At each institution he left an abiding mark, and from each he was drawn to the next not only by the

prospect of higher position and more congenial work, but by a certain spirit of adventure. His was a wide-roving disposition; the trait showed itself not only in the many shifts of his career but in the range of his scholarly work.

"Young's attainments were extraordinarily wide. Within the range of economics there was hardly a field in which he was not eminently competent. From the most refined theoretical niceties to the most complicated realistic situations, his grasp was secure and his judgment keen. He was a mathematician of the first order; a statistician attentive to the concrete phenomena underlying the bare figures as well as to the most exacting requirements of refined technique; conversant with economic history; alive to the remarkable and often unique phenomena which have unrolled themselves before our eyes during these first three decades of the twentieth century; above all, a master of the principles of economics, steeped in the great literature of the subject, its method, its relation to other disciplines. With this complete grasp of his chosen subject, he combined an interest and comprehension in a wide range of others—not only history and politics, but natural science, philosophy, and literature. He had picked up for himself an abundant linguistic equipment. Not least, he had a deep, warm interest in music; was no mean performer on the organ, and at one stage in his career supplemented a slender income by playing that instrument. He knew all the great composers and their works, enjoyed and judged a great interpretation. Here, as in his intellectual work, he valued the old without belittling the new.

"Young left behind him no large body of written work. A great number of reviews and brief notes, and some elaborate papers, on a surprising variety of subjects, appeared in periodicals and in the transactions of societies. Some of the more notable of these were gathered in a volume, *Economic Problems New and Old,* published in 1927. He had in preparation a book on money and credit—one of the many fields in which he had worked intensively—and it is hoped that enough of this is in definitive form to justify publication. He had planned also to write a book on the fundamentals of economic theory. No one was better qualified for this ambitious task. Everything that he wrote bore the marks of independent thought, keen discrimination, ripe judgment, a background of much more than could be set forth at the moment. And everything bore the marks of the literary craftsman. He had the gift of rounded and dignified utterance; not so pellucid as to save the need of attention and reflection, always allusive, but always urbane, and of unmistakable intellectual distinction. Perhaps he was at his best in papers and addresses surveying some broad subject; such as the presidential address before the American Economic Association on 'Economics and War,' a paper at the University of Virginia on 'The Trend of Economics,' the inaugural lecture at the University of London on 'English Political Economy,' and the presidential address before Section F of the British Association on 'Increasing Returns and Economic Progress.'

"Tall and alert, handsome in feature, impressive in bearing, mature and poised, he made his mark whatever the company. And with distinction he combined unfailing sympathy and responsiveness. No one ever went to him, whether a troubled colleague or a timid novice, without helpful response. He was perhaps at his best with advanced students who were probing their way into the core of some intricate problem. The affection and admiration which he inspired among the younger members of the staff at this University is perhaps the greatest testimony both to his personality and his intellect.

To all, young and old, he gave of his time and strength without stint. Probably he gave too much; more could have been achieved for the world and for himself if he had been firmer in saying no. One of the things that tempted him to the London adventure was the prospect (which he thought he saw) of less distraction and greater leisure. But he remained the same, attractive and outpouring, and in London as elsewhere men of all degrees and kinds, students, colleagues, notables in every field, turned to him. Invitations to lectures and meetings multiplied, posts of honor and duty were offered, and the expected freedom for his plans of independent work did not come. The besetting difficulty was his own charm, his own wide competence, his unfailing readiness. He died at the full height of his powers, lamented by a host of friends and admirers, and by none more than by those to whom he had endeared himself at Harvard University."

NOTES

The following names have been added to the membership of the AMERICAN ECONOMIC ASSOCIATION since February 1:

Adams, T. E., 124 F St., Salt Lake City, Utah.
Alton, J., 161 N. Rexford Dr., Beverly Hills, Calif.
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Carter, L. H., Box 412, University, Va.
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Kline, L. E., 214 Commerce Bldg., Urbana, Ill.
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Kuhlmann, C. B., Hamline University, St. Paul, Minn.
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Landone, B., Newton, N.J.
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Thompson, J. G., 37 Hartwell St., Fitchburg, Mass.
Troxell, J. P., University of Kentucky, Lexington, Ky.

Ulrey, O., Michigan State College, East Lansing, Mich.
Ware, N. J., 159 Broad St., Middletown, Conn.
Waring, F. A., 2479 Le Conte, Berkeley, Calif.
Yu, H. L., c/o Mr. Herbert Moy, 855 E. 63rd Pl., Chicago, Ill.

The American Statistical Association held a dinner meeting in New York on March 14 to consider the general topic "Economic Outlook for the Remainder of 1929." Paul Clay spoke on "The Financial Outlook"; Thomas S. Holden on "The Building Outlook"; Julius H. Parmelee on "The Railroad Outlook"; and Ralph C. Epstein on "The Automobile Outlook."

A dinner meeting was also held by this Association on the evening of May 9 to consider the general topic "Financing the Nation's Trade and Industry." Speakers on the program were Carl Snyder, Federal Reserve Bank of New York, "Long Time Trend of Industry and Credit Requirements"; O. M. W. Sprague, Harvard University, "Need of Statistical Data on Credit Control"; B. H. Beckhart, Columbia University, "Bank Credit from 1927 to 1929."

The Boston Chapter of the American Statistical Association held its annual meeting on April 12. On the program were William T. Foster, "Stabilization of Employment"; J. A. Garvey, "An Experiment in Employment Stabilization"; and Charles P. Howard, chairman of the Massachusetts Commission on Administration and Finance, "The Building Construction Program of the Commonwealth."

Announcement is made of a new journal to be devoted to phases of statistics requiring the use of advanced mathematics. This publication will appear under the auspices of the American Statistical Association and under the editorship of Professor Carver of the University of Michigan. Further particulars will appear later.

The Committee on Governmental Labor Statistics of the American Statistical Association has made certain recommendations to President Hoover in regard to the securing of data on unemployment in the census of population to be taken in 1930. The recommendation is briefly that census enumerators ask two questions relating to employment: (1) "If you are ordinarily gainfully employed, are you now out of a job of any kind?" (2) "If you hold a job of any kind, are you on layoff without pay today?" Persons interested in furthering the recommendations are invited to correspond at once with Miss Mary Van Kleeck, Director of Industrial Studies, Russell Sage Foundation, Chairman of the Committee.

A meeting of the Academy of Political Science of New York was held on April 24 for the consideration of the general subject of "Railroad Consolidation."

The Fourth International Management Congress will meet in Paris, June 19-23, 1929. Further information may be obtained at the Commissariat Général, Comité National Organisation Française, 44 Rue de Rennes, Paris (VI^e), France, or from the Joint Committee on Management Congresses, Room 1120, 29 West Thirty-ninth Street, New York City.

Mr. Frederic A. Delano has accepted the presidency of the Stable Money Association.

During March and April a series of five lectures on the William A. Vawter Foundation on Business Ethics was given at the School of Commerce, Northwestern University. The following subjects were considered: "Business Ethics," by Dean Wallace B. Donham of the Graduate School of Business Administration, Harvard University; "Ethical Problems of Commercial Banking," by Melvin A. Traylor, president of the First National Bank of Chicago; "Ethical Problems of the Modern Trust Department," by Harold H. Rockwell, vice-president of the Northern Trust Company of Chicago; "Ethical Problems of Investment Banking," by Trowbridge Callaway, chairman of the Committee on Distribution of the Investment Bankers Association of America; and "Ethical Problems of Newer Forms of Financing," by William F. Gephart, vice-president of the First National Bank of St. Louis.

A new building for the Amos Tuck School of Administration and Finance at Dartmouth College is to be constructed within a short time.

Professor Walton H. Hamilton of Yale University has prepared for the American Library Association, 86 East Randolph Street, Chicago, notes on a reading course in economics.

At the second Causey Conference on World Problems, held at Oberlin College March 21 and 22, the general subject of "Population, a World Problem" was under discussion. Among the speakers were Professor E. M. East of Harvard University, "The Population Pressure and Its Meaning"; Dr. Louis I. Dublin, "Is There Need of Population Control?" Professor H. P. Fairchild, "Immigration"; and Dr. W. S. Thompson, "Danger Spots in Population."

At a recent meeting of the fellowship committee of the Social Science Research Council twenty-seven research fellowships were awarded. The five fellows selected from the applicants in economics were: Earl J. Hamilton of Duke University, to engage in a study of "Money, Prices and Wages in Castile, 1500-1660"; Elmo P. Hohman, present holder of a Social Science Research Council fellowship, "A Comparative Study of American and European Seagoing Labor in the Twentieth Century with Special Reference to the Operation of the LaFollette Seamen's Act"; Calvin B. Hoover of Duke University, "The Banking System of the Union of Socialist Soviet Republics with Special Reference to the Problems of a 'Managed Currency'"; Earle L. Rauber of the University of Chicago, "Electrification Program and Labor Legislation in Actual Practice in Czechoslovakia, Austria and Russia"; Edgar A. J. Johnson of Harvard University, "A Study of British Mercantilism of the Eighteenth Century."

Applications for fellowships for 1930 should be made to John V. Van Sickle, Fellowship Secretary of the Social Science Research Council, 230 Park Avenue, New York City.

Among the professors at Harvard University receiving grants from the Milton Fund are Arthur H. Cole, associate professor of economics, for the purpose of tracing the geographical variations of commodity prices from 1790 to 1860 and of directing specific attention to the history of commodity prices in New England in order to establish a commodity price index for that area; also Abbott P. Usher, associate professor of economics, for the purpose of making

copies of manuscripts on the Exchange Bank at Barcelona dated 1401 to 1715, now in Spanish archives, and of studying them at Cambridge.

The American University, Washington, D.C., offers, as effective September 1, 1929, two research assistantships in transportation. Each research assistant will receive $1,500. Any graduate of a college in the United States or Canada who has made economics a major subject may apply. Preference will be given to those who have had a year of successful graduate work in economics or business administration. Application should be made to the chancellor, Lucius C. Clark, 1901 F Street, Washington, D.C.

Miss Amy Hewes of Mount Holyoke College gave during March and April a series of lectures at the New York School of Social Work on the newly established Forbes Lectureship on "The Contribution of Economics to the Field of Social Work."

Professor T. N. Carver of Harvard University gave a series of four lectures at the University of Illinois during the week of April 8-12. The subjects of his lectures were: "Social versus commercial values," "Self-expression and social utility," "The criteria of distributive justice," "Earned and unearned increment."

A series of awards for articles written from the point of view of interesting the public in social work will form a part of the program of the Harmon Foundation, 140 Nassau Street, New York, during 1929. Awards are offered for unpublished articles written for magazines in general circulation and presenting social conditions and social work in popular style. The contest is open to writers anywhere in the United States who may submit manuscripts before September 16.

In the March issue of the Review mention was made on page 174 of the subject catalogue of books in the British Library of Political and Economic Science. A subsequent announcement from the London School of Economics, which is undertaking the preparation of this volume, states that the scope of the work has been further extended by the inclusion of the Edward Fry Library of International Law and the Libraries of the National Institute of Industrial Psychology and the Royal Institute of International Affairs.

The Adelphi Company (112 East Nineteenth Street) announces for fall publication *Industrial History of the United States* by Professor Witt Bowden of the University of Pennsylvania, *Life Insurance* by Dr. Lee K. Frankel of the Metropolitan Life Insurance Company, and *Economic Interpretation of History* by Professor Henri Sée of the University of Rennes, translated by Professor M. M. Knight of the University of California.

Attention should have been earlier called to numbers of *Agricultural Economics Literature,* published by the Bureau of Agricultural Economics of the United States Department of Agriculture. These mimeographed bulletins contain signed reviews, descriptive notes and abstracts topically arranged.

The Bureau of Business Research of Ohio State University has just completed for distribution Number 1, Volume I of *Industrial and Commercial Ohio.* This contains about 500 pages bound in a loose-leaf, board binder.

The International Institute of Agriculture (Rome, Italy) has changed the form of the publication, *International Review of Agriculture*. Beginning with January of this year the *Review* will appear in three separate parts: (1) *Monthly Bulletin of Agricultural Science and Practice*, (2) *Monthly Bulletin of Agricultural Economics and Sociology*, (3) *Monthly Crop Report and Agricultural Statistics*.

The first number of the *Journal of Adult Education* appeared in February, 1929, published by the American Association for Adult Education (41 East Forty-second Street, New York, $3 per annum).

Announcement is made of *La Revue Marxiste*, the first number of which appeared in February, 1929 (47 Rue Monsieur-le-Prince, Paris).

Research investigations similar to those made by the Harvard Economic Society in its *Review of Economic Statistics* have been undertaken by the Banco de la Nacion Argentina under the title *Economic Review*, published in English. This provides material dealing with South American countries which serves to supplement the studies made in other countries.

The Bank Gospodarstwa Krajowego, the National Economic Bank of Warsaw, Poland, began in January, 1929, the publication of a *Monthly Review* devoted to a description of the economic situation in Poland.

A new quarterly entitled *Annales d'Histoire Economique et Sociale* has begun publication in France under the directorship of Marc Bloch and Lucien Febvre (Librairie Armand Colin, 103 Boulevard Saint-Michel, Paris, 15 fr.).

A new quarterly entitled *Revista Mexicana de Economia* is published by the Instituto Mexicano de Investigaciones Economicas under the directorship of Eduardo Villaseñor (Av. Juárez 10, México, D. F., $10 per annum).

The following notes concerning the Brookings Institution have been received:

Robert R. Kuczynski of the Advisory Council of the Brookings Institution has returned from Europe and is now engaged in writing the second volume of his study on the *Balance of Births and Deaths*.

Tariff on Iron and Steel by Abraham Berglund of the University of Virginia and Philip G. Wright of the staff of the Brookings Institution is now in press.

Professor Virgil Willet of Ohio State University has undertaken, under the auspices of the Brookings Institution, a study of the Federal Farm Loan Board.

Appointments and Resignations

Professor E. L. Bogart has been granted leave of absence from the University of Illinois for the year 1929-30 in order to be associated with Claremont Colleges, California, for graduate and advisory work.

Miss Emily Clark Brown, special agent of the Women's Bureau, has been appointed assistant professor of economics at Wellesley College. Miss

Brown's work will be particularly in the field of labor and industrial relations.

Professor Milton Conover of Yale University will be on leave next year, and will be in England completing a piece of research.

Professor W. J. H. Cotton of Duke University will return from Europe in September. He has been on leave of absence for the academic year 1928-29 studying labor problems in Germany, Belgium and England.

William Leonard Crum, professor of statistics in the Graduate School of Business, Stanford University, has been elected professor of economics in Harvard College, to serve from September 1, 1929.

Professor Clive Day of Yale University is to be on leave during the second half of the year 1929-30.

Mr. T. F. Debnam has resigned as instructor in the economics department at Lafayette College.

Dr. Ralph C. Epstein of the University of Buffalo has been promoted to a full professorship of economics and business organization at that institution.

Mr. Leo Haak of the University of Iowa has been appointed assistant professor of economics in Denison University, beginning the academic year 1929-30. He will have charge of courses in marketing, transportation and investments.

Dr. Henry F. Holtzclaw has returned from a semester's leave of absence to the School of Business at the University of Kansas. He spent the semester teaching statistics and insurance at the University of Illinois.

Assistant Professor Earl J. Hamilton of Duke University has been granted leave of absence for the academic year 1929-30 to hold a Social Science Research Fellowship. Dr. Hamilton plans to complete his study in the Spanish archives of money, prices and wages in Castile from 1500 to 1660, especially as affected by the influx of treasure from the Hispanic colonies of the new world.

Professor Calvin B. Hoover of Duke University has been granted leave of absence for the academic year 1929-30 to hold a Social Science Research Fellowship. He will spend the entire year in Russia studying the Russian banking system.

Mr. Francis W. Hopkins, now a graduate student at Yale University, has been appointed an instructor in political economy at the same institution.

Dr. William Jaffé, former fellow of the Social Science Research Council, has been appointed assistant professor of economics at Northwestern University.

Professor Eliot Jones of Stanford University will spend the summer traveling in France and England.

Mr. Homer Jones of the University of Chicago has been elected instructor in economics at the University of Pittsburgh for the year 1920-30.

Mr. Robert W. King of the University of Washington has been appointed instructor in accounting at Yale University.

Dr. Frederic E. Lee, commercial attaché at London, and formerly dean of the College of Arts and Sciences and professor of economics and sociology at the University of Maryland, has been appointed professor of economics at the University of Illinois.

Mr. H. J. Laski of the London School of Economics has been appointed visiting professor in government for the second term of the year 1929-30 at Yale University.

Professor Ben W. Lewis of Oberlin College will be on leave of absence during the year 1929-30 for the study of law at Columbia University.

Mr. James G. Leyburn has been promoted to an assistant professorship in sociology at Yale University.

Mr. Shaw Livermore, formerly assistant dean of the Harvard School of Business Administration has been appointed assistant professor of economics at the University of Buffalo.

Mr. E. C. Lorentzen, assistant professor of economics at the University of Utah, resigned at the close of the winter quarter in order to accept a position as economist with the Goodrich Rubber Company of Akron, Ohio.

Mr. Glenn E. McLaughlin will fill the position of Professor Ben W. Lewis at Oberlin College during the year 1929-30.

Mr. J. R. Mahoney, a graduate student of Harvard University, has been appointed to the place of Assistant Professor E. C. Lorentzen at the University of Utah.

Professor Joseph Mayer of Tufts College will be on leave of absence in the year 1929-30 in charge of the permanent office of the American Association of University Professors in Washington.

Dr. John Richard Mez, for the past five years with the faculty of economics at the University of Arizona, has been appointed associate professor of economics and political science at the University of Oregon.

Professor Wesley C. Mitchell of Columbia University lectured and conducted a graduate conference on the subject of cyclical behavior of economic activities at Princeton University on March 22, 1929.

Professor Waldo F. Mitchell has been made acting head of the department of economics at DePauw University.

Mr. W. L. Nunn, instructor in economics at the University of Pittsburgh, has been added to the instructing staff of New York University for the year 1929-30.

Professor Paul S. Peirce has resumed work at Oberlin College after a half-year leave of absence spent in Europe. During the fall term he studied at the London School of Economics.

Professor H. Bruce Price has resigned his position as professor of agricultural economics at the University of Minnesota and on May 1 became head of the department of markets and rural finance at the University of Kentucky.

Professor Louis B. Schmidt goes from the Iowa State College of Agricultural and Mechanic Arts to the University of Alabama for the first term of the summer session to give courses in the westward movement in American history, the United States from 1828 to 1865 and the United States and world politics since 1895.

Mr. Robert J. Schneider of the University of Washington has been appointed instructor in political economy at Yale University.

Miss Katherine E. Shilling has been appointed at statistical assistant in the department of agricultural economics at Massachusetts Agricultural College.

Mr. Newlin Smith has been appointed instructor in economics at the University of Buffalo.

Dr. Albion G. Taylor has been appointed acting dean of the School of Economics and Business Administration of the College of William and Mary to fill the vacancy caused by the death of Dr. William A. Hamilton.

Dr. E. T. Town, head of the department of economics and dean of the School of Commerce at the University of North Dakota, has been on leave of absence during the past semester.

Miss Mary Bosworth Treudley, who has just returned to the United States after five years of service in Nanking University has been appointed instructor in economics and sociology at Wellesley College.

Mr. Herschel Underhill, formerly assistant instructor in economics at the University of Kansas, is now teaching economics at State Teachers College, Springfield, Missouri.

Dr. C. E. Warne, assistant professor of economics in the University of Pittsburgh, will teach in the Bryn Mawr Summer School for Women Workers.

Mr. Vernon Orval Watts has been appointed lecturer in sociology at Wellesley College.

Dr. Charles Raymond Whittlesey, instructor in economics at Princeton University, has been promoted to the rank of assistant professor.

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